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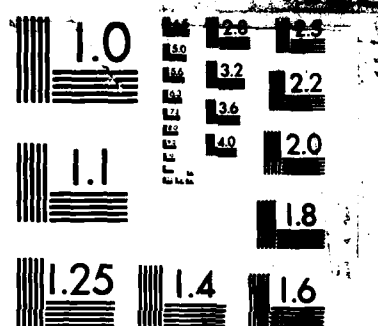
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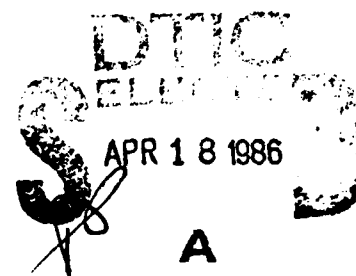
US Army Corps
of Engineers
Los Angeles District



COAST OF CALIFORNIA STORM AND TIDAL WAVES STUDY

AD-A167 645

METEOROLOGICAL DATA INVENTORY SOUTHERN CALIFORNIA COASTAL ZONE



CCSTWS 85-7
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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) THIS REPORT DETAILS THE RESULTS OF A DATA SEARCH ON THE METEROLOGY OF THE COASTAL WATERSHEDS BETWEEN RAGGED POINT SAN LUIS OBISPO COUNTY AND THE UNITED STATES/ MEXICAN BORDER. THIS STUDY IS PART OF THE COAST OF CALIFORNIA STORM AND TIDAL WAVES STUDY CURRENTLY BEING CONDUCTED BY THE US ARMY CORPS OF ENGINEERS. INCLUDED IN THIS REPORT ARE GENERAL METEOROLOGICAL DESCRIPTIONS OF THE DRAINAGE AREAS, FOR THE PURPOSE OF PROVIDING BACKGROUND INFORMATION. DATA OF INTEREST INCLUDE: PERCIPITATION PATTERNS, HISTORICAL HYETOGAPHS, WIND PATTERNS AND GENERAL WEATHER PATTERNS RESPONSIBLE FOR THE WIND AND PRECIPITATION.		

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THE DATA SEARCH WAS DIRECTED TOWARDS IDENTIFYING AND COLLECTING
RELEVANT PRECIPITATION AND WIND DATA WITHIN EACH WATERSHED AND LITTORAL
CELL IN THE STUDY AREA.

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METEOROLOGICAL DATA INVENTORY
SOUTHERN CALIFORNIA COASTAL ZONE
RAGGED POINT (SAN LUIS OBISPO COUNTY) TO MEXICAN BORDER
Ref. No. CCSTWS 85-7

Coast of California Storm and Tidal Waves Study

U.S. Army Corps of Engineers
Los Angeles District, Planning Division
Coastal Resources Branch
P.O. Box 2711
Los Angeles, California 90053

DECEMBER 1985

APR 18 1986

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prepared by

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TABLE OF CONTENTS

Acknowledgements	i
TABLE OF CONTENTS	ii
1.0 INTRODUCTION	1
A. Purpose of the Study	1
B. Scope of the Study	2
C. Summary of Findings	3
C.1 San Diego Region	3
C.2 South Coast Region	3
C.3 South Central Region	3
2.0 SAN DIEGO REGION	5
A. Drainage Areas	6
A.1 Drainage areas and Sub-areas	6
A.2 Physiography and Topography	6
A.3 Climate of the San Diego Region	6
A.3.1 General Features	6
A.3.2 Typical Storm Patterns	7
A.3.3 Precipitation Patterns	7
A.3.4 Seasonal Precipitation	8
A.3.5 Precipitation Frequency	8
A.3.6 Coastal Wind Regime	8
A.3.7 Land-Sea Breeze	9
A.3.8 North Pacific Storm Winds	9
A.3.9 Santa Ana Winds	9
A.3.10 Winds and Severe Weather	10
A.3.11 Topographic Effects on Coastal Winds	10
A.3.12 Wind Intensity and Frequency	10
B. Historical Perspective	12
B.1 Historical Outline of Major Wet and Dry Periods	12
B.2 Historical Outline of Major Storms in the San Diego Region	12
B.2.1 Rain Storms	12
B.2.2 Wind Storms	13
C. Data Search and Retrieval Efforts	14
C.1 Technical Approach	14
C.2 Meteorological Data Available	17
C.2.1 Precipitation	17
C.2.2 Wind Measurements Along the Coast	19
C.2.3 Other Relevant Data Sources	20
C.2.4 Related Topics	20
D. Data Gaps and Limitations	21
3.0 SOUTH COAST REGION	32
A. Drainage Areas	33
A.1 Drainage areas and Subareas	33
A.2 Physiography and Topography of the South Coast Region	33
A.3 Climate of the South Coast Region	33
A.3.1 General Features	33
A.3.2 Typical Storm Patterns	34

A.3.3	Precipitation Patterns	34
A.3.4	Seasonal Precipitation	35
A.3.5	Precipitation frequency	35
A.3.6	Coastal Wind Regime	36
A.3.7	Land-Sea Breeze	36
A.3.8	North Pacific Storm Winds	36
A.3.9	Santa Ana Winds	37
A.3.10	Winds and Severe Weather	37
A.3.11	Topographic Effects on Wind	38
A.3.12	Coastal Wind Intensities and Frequencies	38
B.	Historical Perspective	39
B.1	Historical Outline of Major Wet and Dry Periods	39
B.2	Historical Outline of Major Rain and Wind Storms	39
B.2.1	Rain Storms	40
B.2.2	Wind Storms	40
C.	Data Search and Retrieval Efforts	41
C.1	Technical Approach	41
C.2	Meteorological Data Available	45
C.2.1	Precipitation	45
C.2.2	Wind Measurements Along the Coast	47
C.2.3	Other Relevant Data Sources	48
C.2.4	Related Topics	48
D.	Data Gaps and Limitations	49
4.0	SOUTH CENTRAL REGION	61
A.	Drainage Areas	62
A.1	Drainage Areas and Sub-Areas	62
A.2	Physiography and Topography	62
A.3	Climate of the South Central Region	62
A.3.1	General Features	62
A.3.2	Typical Storm Patterns	63
A.3.3	Precipitation Patterns	63
A.3.4	Seasonal Precipitation	64
A.3.5	Precipitation Frequency	64
A.3.6	Coastal Wind Regimes	65
A.3.7	Land-Sea Breeze	65
A.3.8	North Pacific Storm Winds	66
A.3.9	Santa Ana Winds	66
A.3.10	Winds and Severe Weather	67
A.3.11	Topographic Effects on Coastal Winds	67
A.3.12	Wind Intensity and Frequency	67
B.	Historical Perspective	68
B.1	Historical Outline of Wet and Dry Periods, South Central Region	68
B.2	Historical Outline of Major Storms in the South Central Region	68
B.2.1	Rain Storms	68
B.2.2	Wind Storms	68

C.	Data Search and Retrieval Efforts	70
C.1	Technical Approach	70
C.2	Meteorological Data Available	74
C.2.1	Precipitation	74
C.2.2	Wind Measurements Along the Coast	76
C.2.3	Other Relevant Data Sources	77
C.2.4	Related Topics	77
D.	Data Gaps and Limitations	79
5.0	OCEAN STORMS	94
A.	General Description of Oceanic Storm Regions	94
A.1	Types of Storms Affecting the California Coast	94
A.1.1	High-Latitude North Pacific	94
A.1.2	Mid-Latitude North Pacific	94
A.1.3	Low-Latitude Type	95
A.1.4	Eastern Pacific Tropical Storms	95
A.1.5	Southern Hemisphere Storms	95
A.2	General Climate of the North Pacific	95
A.2.1	Winter Climate, North Pacific	95
A.2.2	Summer Climate, North Pacific	96
A.2.3	Winter Climate, South Pacific	96
A.2.4	Summer Climate, South Pacific	96
A.3	Effects of Normal and Abnormal Storm Tracks	96
B.	Historical Perspective	98
B.1	Major Periods of Intense Oceanic Storms	98
B.2	Major Individual Storms	98
C.	Data Search and Retrieval Efforts	100
C.1	Technical Approach	100
C.2	Data Available on Ocean Storms	101
C.2.1	Mid-Latitude North Pacific Ocean	101
C.2.2	Tropical Storms	102
C.2.3	Southern Hemisphere Storms	103
C.2.4	Other Pertinent Data	103
D.	Data Gaps and Limitations	104
	REFERENCES	106
	APPENDICES	
	PLATES	

1.0 INTRODUCTION

A. Purpose of the Study

This report details the results of a data search on the meteorology of the coastal watersheds between Ragged Point, San Luis Obispo County and the U.S. - Mexican Border. This study is part of the Coast of California Storm and Tidal Waves Study currently being conducted by the U.S. Army Corps of Engineers.

The results of this study can be used to develop detailed plans of study for the three coastal regions within the jurisdiction of the Corps of Engineers, Los Angeles District. These are the South Central Region, which includes San Luis Obispo, Santa Barbara and Ventura counties; the South Coast Region; which includes Los Angeles, San Bernardino, Riverside, and Orange Counties; and the San Diego Region; which includes portions of San Diego, Riverside and Orange Counties. Also included is a study on Pacific ocean storms which affect the entire coast of California.

Included in this report are general meteorological descriptions of the drainage areas, for the purpose of providing background information. These sections are followed by detailed accounts of the sources of meteorological data which are available. Data of interest include precipitation patterns, historical hyetographs, wind patterns and general weather patterns responsible for the wind and precipitation. Also of interest are data on Pacific storms and storm patterns. Included in the discussion are the location of data, data formats available and indications of the quality of the data. Data gaps and limitations are noted, and suggestions are made for reducing these limitations.

This study will allow a serious start towards the development of the necessary data base for the Coast of California Storm and Tidal Wave Study (CCSTWS), since all pertinent data available are identified, and the means recorded for retrieving these data.

B. Scope of the Study

This study was conducted under Contract No. DACW09-85-D-0010, Delivery Order No. 0002, U.S. Army Corps of Engineers, Los Angeles District. The scope includes a meteorological literature survey and data search for the South Central, South Coast and San Diego regions. The literature survey and data search were directed towards:

- (1) Historical precipitation patterns over all watersheds in the study region.
- (2) Precipitation gages in the watersheds.
- (3) Monthly totals of precipitation data, and daily and hourly data for major storms.
- (4) Historical hyetographs of precipitation for major flood events within the study area.
- (5) Historical weather patterns responsible for precipitation patterns.
- (6) Coastline wind patterns responsible for direct erosion and accrual of beach sand.
- (7) Wind gages along the coastline or slightly inland.
- (8) Historical variations in the coastline wind patterns.

The data search was directed towards identifying and collecting relevant precipitation and wind data within each watershed and littoral cell in the study area. An annotated bibliography, submitted separately, is also included in this study.

C. Summary of Findings

Pertinent meteorological conditions and the available data related to these conditions were examined. The following gives a summary of the findings by region.

C.1 San Diego Region

This region has a Mediterranean Dry-Summer climate. Temperatures are strongly influenced by the cool coastal waters, and summers are largely dry, with occasional thunderstorms in the mountains. Most rain falls in the winter months.

This region has more than two hundred present and discontinued rain gages. Many gage records have more than one hundred years of data. The region is well covered in this respect.

Coastal wind data are much more limited, as only one gage has a record of more than fifty years (San Diego Naval Air Station). There are, however, several coastal stations with records on the order of fifteen years, so that recent data are available.

C.2 South Coast Region

This region is characterized by a Mediterranean Dry-Summer climate. Temperatures are influenced by the cool coastal ocean waters, and summers are largely dry, except for rare thunderstorms in the mountain areas. Low clouds and fog, especially in night and early morning hours are prevalent along the coast in spring and early summer. Most rain falls in the winter months.

There are more than 1000 present and discontinued rain gages in this region, and many have more than fifty years of data. This region is extremely well covered in this respect.

Coastal wind data are more sparse, and only one station (Los Angeles Airport) has more than fifty years of data. Several, however, have almost thirty years of data, so the recent period is well covered.

C.3 South Central Region

This region is characterized by a Mediterranean Dry-Summer climate. Summers are dry and temperatures are influenced by the cool coastal waters. North of Point Arguello, prevailing northwest winds are strong; coastal fog and low clouds are common in the spring and summer. Some inland areas (in particular, the Cuyama Badlands) are relatively dry all year; in the rest of the region, winters are usually wet.

There are more than 350 present and discontinued rain gages in the region, many with long reliable records. The region is well covered in this respect.

Unfortunately, there are few long-term coastal wind data in the region of the coastal sand dunes near the San Antonio Creek terminus, and the Pismo Beach area. There are very recent data at Grover City, and relatively long records at Vandenberg Air Force Base, but this is a shortcoming. Coastal wind data are available elsewhere in this region.

2.0 SAN DIEGO REGION

The San Diego Region includes portions of Orange, Riverside and San Diego Counties. The extent of the San Diego Region is defined by the watersheds draining to the Oceanside Cell, which extends from Dana Point to Point La Jolla; the South Oceanside Reach, which includes the short distance between Point La Jolla and False Point; the Mission Bay Cell, which extends from False Point to the Sunset Cliffs; the South Mission Bay Reach, which includes the Sunset Cliffs; and the Silver Strand Cell, which extends from the mouth of San Diego Bay to just south of the mouth of the Tijuana River. Of these areas, the watersheds draining to the Oceanside Cell are the most important from a sediment transport point of view, for reasons which will become apparent in the following discussions. These littoral cells correspond to those defined in the Assessment and Atlas of Shoreline Erosion Along the California Coast (July 1977) and are shown in Figure 2.1, taken from that document. The following sections give general meteorological information regarding the watersheds draining into these regions.

A. Drainage Areas

A.1 Drainage areas and Sub-areas

In the San Diego Region there are seven major river basins and four major drainage groups. The river basins drain to the Tijuana River, the Otay River, the Sweetwater River, the San Diego River, the San Luis Rey River, and the Santa Margarita River. The major drainage groups are the San Diego Group, the San Clemente Canyon Group, the Escondido Creek Group and the Laguna Hills Group. These watershed areas are indicated on Plate 2.1 and their respective surface areas are shown in Table 2.1.

As is seen in Table 2.1, the river basins are extensively controlled, largely by water-supply reservoirs. This is particularly true of the more southern basins, which have from 70% to 90% of their surface areas controlled. The reservoirs have the effect of retaining most sediment which enters, and thus severely limit the quantity of sediment arriving at the coast. For a more complete description, one is referred to the companion report on hydrology.

A.2 Physiography and Topography

The watersheds draining to the San Diego Coast Region are bounded on the east by the Peninsular Ranges and on the north by the southern end of the Santa Ana and San Jacinto Mountains. The Peninsular Ranges run southward and have a complex topography consisting of valleys and canyons with more or less isolated mountains. For a more complete discussion, one is referred to the companion report on hydrology.

A.3 Climate of the San Diego Region

A.3.1 General Features

The climate of the San Diego Region is classified as a Mediterranean Dry-Summer Subtropical type. Along the maritime fringe temperatures are controlled by the sea, with the average winter air temperature about 55°F and an average summer temperature about 68°F. Inland temperatures vary much more, with mean winter temperatures in the 40's in the mountain areas, and summer temperatures in the mid-70's. The average diurnal temperature range in summer is about 16°F on the coast and over 40°F in inland mountain areas, while in winter it is about 12°F on the coast and around 30°F in mountain areas.

An important climatic feature of the region is the formation of low stratus clouds and fog along the coast, especially during night and morning hours. This condition is caused by the cold waters in the coastal region, and is enhanced by the presence of the Catalina Eddy, a low-pressure cyclonic cell which is formed

by the prevailing northwesterly winds past Point Conception. When the eddy is intense, low clouds and fog often develop over the area. Typically, about twenty days per month exhibit low clouds or fog along the coast from April to October, but the year-to-year variations are great in the persistence of this phenomenon. In general, the low clouds and fog are less prevalent in this region than in more northerly areas.

A.3.2 Typical Storm Patterns

The main synoptic feature controlling the weather in the San Diego Region is the North Pacific High, the location and intensity of which affects the tracks of storms associated with low pressure cells. In winter, the Pacific High is often weak and moves south, allowing storms to move in from the west or northwest.

Most rain is associated with winter cold fronts, of which there are two main types: the high-latitude type, in which a blocking high-pressure cell builds east of 160°W and the storms approach from high latitudes, and the low-latitude type, in which blocking takes place between 160°W and 180°W, and storms, often developing in the Hawaiian region, approach from lower latitudes.

A second synoptic feature which affects the weather in this region is the North American High-Level Anticyclone. Occasionally in summer and early fall, masses of moist, tropical air move northward along the western perimeter of this anticyclone, and produce thunderstorms, especially in the mountain areas. The storms associated with this warm, moist air movement are referred to as "Sonoras," and account for about 7% of the rainfall in the region.

Tropical storms in the region are rare, but occasionally tropical storms divert from their usual paths and move through the region, bringing heavy rains. Usually, these storms are in the dissipation stages, because of the cold water near the coast, and their intensities are reduced. The warm, moist air associated with the storms often produces intense thunderstorm activity.

A.3.3 Precipitation Patterns

Precipitation patterns in the San Diego Region are strongly orographic, as can be seen in Figure 2.2, which shows isohyetal contours of mean annual precipitation. In addition to orographic effects, there is a trend towards decreasing rainfall in the south, a result of the fact that fewer winter storms (normally approaching from the northwest) reach the southern part of the region.

Typical precipitation values at selected stations are shown in Table 2.2. From these data, one can see another feature of the precipitation in this region--the wide year-to-year variation in rainfall. Typically, the maximum measured value at a station is twice the annual average, and the minimum value is about 30% of the average. This is due to the fact that rainfall is largely a result of a few storms each season, and a few storms can make the difference between a dry year and a wet year.

A.3.4 Seasonal Precipitation

As was mentioned above, most precipitation in the San Diego Region is associated with winter cold fronts. Typically, 90% of all precipitation in the region occurs during the months of November through April. Table 2.3 shows mean monthly precipitation at selected stations in the region. Note the low values of precipitation in the summer months near the coast, especially in the south. In the high mountain areas, however, there normally is significant precipitation in the late summer and early fall, most of which is due to thunderstorm activity, and very occasionally, tropical storms.

Most precipitation falls as rain in the San Diego Region. Occasionally there are snowfalls in the high mountain areas, but in most of the region, the climate is temperate.

A.3.5 Precipitation Frequency

Precipitation frequency for given intensities and durations is important in this region because of the intermittent nature of precipitation, and the large year-to-year variations. There are two excellent sources of data on this subject. One is the NOAA Precipitation-Frequency Atlas of the Western United States, Volume XI-California. This atlas provides isopluvial contours for 6-hour and 24-hour precipitation with 2-year to 50-year return periods.

The second source is the California Department of Water Resources publication "Rainfall Depth-Duration-Frequency for California", Goodridge (1981^b). This publication contains measured intensities and depth-duration-frequency tables for many stations in California.

In general, the intensities are dependent upon elevation, with the lowest near the coast and highest in the mountain areas. For detailed information, the reader is referred to the above sources.

A.3.6 Coastal Wind Regime

The basic airflow in the San Diego Region is northwesterly, which is due to the eastern North Pacific High. This high is dominant in summer, but usually moves south and weakens in winter. Winter winds are still primarily from the northwest, but are modified by passing fronts and other meteorological disturbances. East and southeast winds are common as cold fronts approach, and often veer south or southwest with the passage of storms.

While the general trend is from the northwest, the flow is influenced by the change in coastline direction at Point Conception. The flow essentially separates at this corner, and produces a large, cyclonic eddy, often centered

around Santa Catalina Island, whence the name "Catalina Eddy." This eddy alters the basic flow, and often produces a westerly or southwesterly flow at the coast (Figure 2.3). When the eddy is intense, low clouds often develop over the coastal area.

This basic pattern of prevailing winds is often modified by various synoptic conditions. These are discussed in the sections which follow.

A.3.7 Land-Sea Breeze

An important factor in the coastal wind patterns of the San Diego Region is the development of a land-sea breeze pattern. The diurnal variation in wind flow is caused by the heating of the land surface during the day, and cooling during the evening. As would be expected, the land breeze is strongest in the winter months, and the sea breeze is strongest in summer.

On the average, the land cooling is sufficiently strong in winter to create a direct offshore flow, countering the general onshore flow of the prevailing winds. In summer, however, the land breeze is weaker, and moves along the coast (Figure 2.4) in the southern part of the region (DeMarrais et al, 1965). Wind speeds at night are generally low, on the order of 3 to 5 mph. Daytime sea breezes are often on the order of 10 to 15 mph.

A.3.8 North Pacific Storm Winds

The basic wind pattern is altered by the passage of Pacific storms, most of which arrive in the winter months with active weather fronts. Most fronts are either occlusions or cold fronts, but the occlusions tend to acquire the characteristics of a cold front as they move southwestward over Southern California (DeMarrais et al, 1965). Although there is no single typical flow pattern associated with fronts, there are often strong, and sometime damaging, easterly or southeasterly winds as the fronts approach. This wind can attain 30 mph or more, but this is an infrequent occurrence. With the passage of the front, winds veer toward the southwest.

Storms associated with warm fronts are much rarer, and are usually associated with low-latitude type storms. Winds on the order of 20 to 25 mph are not unusual during the passage of these fronts, and sustained winds can often be much higher.

A.3.9 Santa Ana Winds

Santa Ana Winds are an important factor in this region, especially in fall, when they can produce extreme fire danger. These foehn type winds generally develop a day or two after the passage of a cold front. Although quite rare during summer months, Santa Anas, when they do occur, can produce extraordinarily

hot and dry conditions, with exceedingly high fire danger. In winter, the winds are generally cold, and can extend over 100 miles seaward (Stevenson, 1960). A typical wind pattern is shown in Figure 2.5, where the general offshore pattern is seen in the San Diego Region. Typically, winds are 20 to 30 mph in canyon areas, but severe winds are not unusual, and can attain speeds of over 90 mph.

A.3.10 Winds and Severe Weather

Thunderstorms are rare in the coastal areas, but may occur at any time of the year (DeMarrais et al, 1965). On the average, they occur on one or two days a year in the coastal areas, and 10 to 15 days a year in the mountains. They are generally weak on the coast.

Coastal waterspouts and tornadoes are very infrequent, but have been documented on several occasions. In October 1958, eight waterspouts were sighted off of San Diego (DeMarrais et al, 1965). Goodridge (1979) indicates eight tornado sightings in the region between 1951 and 1978.

Tropical storms are rare, but considerably more frequent than in the more northern regions. In general, the tropical storms which arrive in this region are dissipating, due to the cold water that is usually present off the Southern California coast. This was the case for recent tropical storms Norman (1978), Doreen (1977), and Hyacinth (1972). Tropical storm Kathleen (1976) produced 77 mph winds inland. Goodridge (1979) reports that there is a 10% probability of a tropical storm occurring in southeastern California in any year, while on the coast, the probability is less than 5%.

A.3.11 Topographic Effects on Coastal Winds

Unlike the more northern regions, topography plays a smaller role in coastal wind patterns in the San Diego Region. Aside from the already mentioned Catalina Eddy, produced by the Santa Ynez Mountains and change in coastline direction at Point Conception, there are two main topographic features which affect local winds. One feature is the La Jolla Mesa, which alters the flow near San Diego in a fashion similar to, but not as strongly as, the Palos Verdes Peninsula above Long Beach. The other feature is the Laguna Hills, which rise out of the sea near Dana Point. The rest of the coastal region is relatively flat and has little effect on the prevailing coastal winds (Figure 2.3). The offshore islands of Santa Catalina and San Clemente also alter the local flow, but because of the distance offshore, the effects are not large.

A.3.12 Wind Intensity and Frequency

Tables 2.4, 2.5 and 2.6 summarize the wind intensities and frequencies for the San Diego Region. These data are taken from Goodridge et al. (1979) and Goodridge (1978).

There is only a moderate seasonal variation in mean speed (Table 2.4), but the high winds show a strong seasonal dependence, with over 4.5% of the winds greater than 17 knots in January, a rainy-season month. Winds in general are moderate compared to those north of Point Arguello.

Table 2.5 indicates the wind direction, and the influence of the prevailing northwest winds is seen. However, the frequency of southwest and west winds indicates, in part, the influence of the Catalina Eddy.

B. Historical Perspective

B.1 Historical Outline of Major Wet and Dry Periods

The most comprehensive treatment of the historical rainfall record prior to recorded measurements was done by Lynch (1931). Recent work with tree-ring data by Fritts and Gordon (1980) attempts to extend the record back to 1600. Certain trends may be found in their data, but the uncertainty is large, and caution must be used in the interpretation of their results.

Probably the most interesting feature of Lynch's research is that the Southern California area has experienced many extended drought and wet periods, but that major floods have often occurred during drought periods. Conversely, years of low precipitation have occurred during wet periods.

Figure 2.6 shows the rainfall record at San Diego, along with the accumulated departure from the mean. The record includes Lynch's results for the period 1800 to 1850. One can see that the major wet periods occurred from 1810 to 1825, from 1880 to 1891, and from 1934 to 1945. Major dry periods occurred from 1855 to 1875 and from 1945 to 1975, with several other dry periods. Note the wet years during these dry periods, and the very dry years in wet periods. Although difficult to judge, the past seven years appear to be a wet period.

The extreme variability should also be noted, as there is little in the way of a year-to-year correlation. Extremely dry years can be followed by extremely wet years, and vice versa. This is an important characteristic of the region.

B.2 Historical Outline of Major Storms in the San Diego Region

There is no definitive history of storms in this region, and early accounts are qualitative in nature. The following is a brief outline of some important storms.

B.2.1 Rain Storms

Kuhn and Shepard (1981) document accounts of storms in the last century, including the series of storms in 1862 which produced disastrous floods. Another series occurred in 1884, beginning around February 14, when 13 inches of rain fell in two weeks near Oceanside. An intense thunderstorm dropped 7.5 inches of rain in eight hours at Encinitas on October 12, 1889. In this century, severe flooding was caused by two storms of January 14-19 and 24-29, 1916. These and other major storms are listed in Table 2.7.

The storms of December 27, 1940 to January 7, 1941 brought heavy rains; but the 1943 season, with much less total rainfall, resulted in floods in the San Diego Region, a result of one of the most severe storms on record, that of

January 21-24, 1943.

More recently, severe storms of the 1969, 1978, and 1980 seasons have been well documented (Waananen, 1969; Arvola, et al. 1979; Wahl et al. 1980). One recent storm of interest (because of the high intensities of rainfall) is that of March 8, 1968 (San Diego County, 1968).

B.2.2 Wind Storms

Wind storms get much less attention in this region, since they seldom cause much economic damage. Often, wind storms are associated with large rain storms, such as the January 21-24, 1943 storm. DeMarrais et al. (1965) mention gale force winds that caused damage all along the coast in May 1959 and April 1962.

As previously mentioned, coastal tornadoes and waterspouts have been sighted in April 1926 and October 1958 in the San Diego Region. Santa Ana winds are often severe, but are generally only documented when there are disastrous fires, such as the November 1961 Santa Ana, which mildly affected the San Diego Region, but contributed to the Bel-Air fire in Los Angeles (Sergius, 1962).

C. Data Search and Retrieval Efforts

C.1 Technical Approach

Data were collected from a number of governmental and public organizations. Previous reports and documents on similar topics were located and examined as part of the literature search. These documents often contained or referred to data, whose original sources were noted. Government and public agencies were then contacted, and in many cases visited.

The following is a general description of data sources relevant to the South Coast Region.

San Diego County Air Pollution Control District

Relevant data include:

Wind data at four coastal sites (on hardcopy) includes hourly wind speed, wind direction, wind vector.

People contacted include:

Virginia Engler (Senior Meteorologist) (619) 565-3945
Clayton White (Senior Technician)

San Diego County Flood Control District

Relevant data include:

Precipitation data, with hourly and charts available in hardcopy.

Streamflow data--daily and selected hydrographs on hardcopy.

Storm reports are available for selected recent storms.

No sediment, debris or fire records are kept.

People contacted include:

Carey Stevenson (Hydrology) (619) 565-5821

Orange County Environmental Management Agency

The data sources at this agency include:

Precipitation data with both hourly (tabulated) and charts from recording gages;

Streamflow data, with both daily (tabulated) and charts from recording gages;

Debris data are limited, but a new program on the San Diego Creek is starting;

Sediment data are collected in conjunction with the USGS.

In a new program just starting, the agency will collect its own data. The sediment data are on a computer data base.

The most recent publication covers the 1982-1983 season.

People contacted include:

Emmett Franklin (streamflow, precipitation)

(714) 634-7473

Bob Collicott (sediment, water quality) (714) 634-7463

Tom Rossmiller, Bruce Moore (sediment, water quality)

Dale Dillon (debris, channel cleanouts) (714) 634-7424

Riverside County Flood Control and Water Conservation District

Relevant data at this agency include:

Precipitation data, with both hourly (tabulated) and charts from recording gages available. In addition, most data are on a computer data base and are available in printouts and electronic form.

Debris and sedimentation data are limited, since the county has few debris basins.

The most recent publication covers the 1979-81 seasons.

People contacted include:

Kathy Carter (Hydrology) (714) 787-1264

Tom Clem (Hydrology) (714) 787-1264

Eric Geibersen (Dams, debris basins) (714) 787-2015

California Department of Water Resources

Data from this agency include:

Streamflow, with data available in the Water Data Information System (WDIS). Data are available on microfiche (least expensive) and electronic form.

Precipitation, also available on WDIS.

Wind data are available in limited form, as it is gathered only in conjunction with particular contracts.

People contacted include:

Bill Mork, State Climatologist (916) 445-5800

California Air Resources Board

Data available from this agency include limited wind data, although the agency now maintains few stations relevant to this study. Occasional measurements are made in conjunction with particular projects. Some data are received from Air Pollution Control Districts, but are more readily available from these agencies.

People contacted include:

Dale Secord, John Kinney and Art Lorenzen (Sacramento)

Bob Cross (El Monte)

Southern California Edison Company

This organization maintains wind monitoring equipment at the San Onofre Nuclear Generating Station, as well as at the Oxnard, Ventura, El Segundo, Los Alamitos and Huntington Beach coastal power plants. Except at San Onofre N.G.S., data are of questionable value.

People contacted include:

Stan Marsh (Meteorologist) (818) 302-1189

Other individuals contacted include:

Robert de Violini, Climatologist, Pacific Missile Range, Pt. Mugu; (805) 989-8383

Don Tuttle, Humboldt County Public Works, Natural Resources Division (Coastal Storm History); (707) 445-7741

Gerald Kuhn, Scripps Institution of Oceanography, (Coastal History); (619) 452-4856

Prof. Gary Griggs, University of California, Santa Cruz (Coastal Storm History); (408) 429-2403

There are several reference libraries in the South Coast Region which are extremely helpful. These include:

University of California Los Angeles, Water Resources Archives, Beth Willard, Librarian (213) 825-7734

This reference library has an extensive collection of publications, manuscripts and material relevant to this study. There is a large collection of uncataloged documents from local agencies as well. In addition, material not available at the UCLA Water Resources Archives can usually be obtained from the University of California, Berkeley through UCLA. Sources are well cataloged and easy to find.

California Department of Water Resources, Southern Division, Los Angeles

The records and documents section combine an extensive collection of California State publications. In addition, there is a large collection of relevant documents and publications from local and federal agencies, including the County Flood Control Agencies. Sources are well cataloged and easy to find.

California Institute of Technology Libraries

Extensive collection of relevant journals and some federal and state publications. The best sources are the Environmental Engineering Library, Keck Laboratory, and the Engineering Library (Millikin Libraries). Unfortunately, the collections are spread out over several buildings, and a certain amount of searching is often required.

University of California, Los Angeles, Engineering Library and Geology Library

These two libraries have extensive collections of relevant journals. The Engineering Library has vast holdings of Weather Bureau/Weather Service publications. The geology library has all relevant U.S. Geological Survey Water-Supply Papers and Water Resource Data (as do the Water Resources Archives, where they cannot be checked out) and other U.S.G.S. publications. Both are excellent sources for reference material.

National Weather Service, Wilshire Federal Building

The reference room (normally closed to the public) has an extensive, uncataloged collection of relevant publications, including out-of-print publications and unpublished documents. Wind data are also available.

U.S. Army Corps of Engineers, Los Angeles District, Library

This library has most Corps of Engineers publications, including Beach Erosion Board and CERC publications. Some publications from local and state agencies are also available, as are some U.S.G.S. Water-Supply Papers and Water-Resources Data. References are often miscataloged and difficult to find.

Southern California Metropolitan Water District

The reference library has (in theory) all MWD publications, although relevant ones often seem to be missing. In addition, there is a good collection of California Department of Water Resources publications.

C.2 Meteorological Data Available

Tables 2.8 and 2.9 list some significant rainfall and wind gages in this region. More detailed and complete lists appear in Appendix A. Tables 2.8 and 2.9 are provided as a quick reference.

C.2.1 Precipitation

There are approximately 200 present and discontinued precipitation gages in the San Diego Region. Of these, most are maintained cooperatively with the National Weather Service and the San Diego County Flood Control District. Table 2.8 lists some stations with very long records. The following is a description of the data sources.

C.2.1.a San Diego County Flood Control District

A list of gages maintained by this agency is included in Appendix A. The agency maintains records of daily precipitation for all stations in tabular form. In addition, charts and digitized tape from recording gages are kept and can be used for the development of storm hyetographs. Data can be obtained by specifying the stations and period of record.

C.2.1.b Riverside County Flood Control and Water Conservation District

About ten gages which are of interest in the San Diego Region are maintained by this agency; all are in the upper Santa Margarita River basin. Data are available in tabular form, although most data, including all recent data, are being presently entered on a computer data system. Charts are available, and storm intensity data are maintained and are being entered into the computer data system. Relevant gages are listed in Appendix A.

C.2.1.c Orange County Environmental Management Agency

This agency keeps nine gages in the Laguna Hills Group (San Juan Creek basin). Data are available in tabular form, and charts from recording gages are maintained. Relevant gages are listed in the Appendix, along with examples of data.

C.2.1.d California Department of Water Resources

This agency maintains few stations, but now keeps records of over 4000 stations in California. Goodridge (1981a) has compiled microfiche files for these stations, and these data are being submitted under a separate cover. In addition, updates for 1981 through 1983 provided by William Mork are also being submitted under a separate cover.

These data include monthly precipitation for the period of record, among with useful calculated values (average, departure from the average, cumulative departure, etc.). A second record includes monthly frequency data, with return periods from 0.01 to 10,000 years.

In addition, Goodridge (1980, 1981b) has published in microfiche form measured maximum daily rainfall for over 1100 gages and depth-duration-frequency data from 689 recording and 853 non-recording gages. The former publication includes maximum daily rainfall by month. The latter includes measured intensities from 5 minutes to 60 days by month and year, and includes a frequency analysis.

The above microfiche files are extremely useful for examining rapidly the data characteristics of a particular gage. The latter two publications concentrate on older stations, and are helpful in finding long term records.

The California Department of Water Resources has also published a list of precipitation gages (Bulletin 230-81). Relevant portions of this document are reproduced in Appendix A. Note that these lists often contain errors; it is best to use the list to locate stations in an area of interest, then to find the stations through the agency lists provided in Appendix A.

C.2.1.e National Weather Service

Hourly precipitation for National Weather Service recording gages is now available on microfiche and magnetic tape for data from 1940 to the present. In addition, fifteen-minute recordings from 1971 to the present are available on magnetic tape. The hourly data, as well as daily, monthly and annual data, are available from the National Climatic Data Center. The complete list of data available is lengthy, and will not be repeated here. For reference, see the Selective Guide to Climatic Data Sources, Hatch, (1983).

C.2.2 Wind Measurements Along the Coast

There are relatively few wind gages with records that would be of use to this study. These are listed in Table 2.9. The following is a discussion of the data available.

C.2.2.a National Climatic Data Center

The records of the latter five stations in Table 2.9 are available on microform, and as indicated, on magnetic tape. Exact details of the data available in addition to hourly wind data can be found in the Index of Original Surface Weather Reports, National Climatic Data Center.

The most complete station in Table 2.9 is that of San Diego Naval Air Station, which has data from 1922 to the present; these data are digitized starting in 1946.

C.2.2.b San Diego County Air Pollution Control District

The first three stations in Table 2.9 are supported by the San Diego County APCD. These data extend back to 1972, and are available from this agency in hardcopy only. Data include wind speed, wind direction and wind vector averaged over one hour periods. The data are verified.

C.2.2.c Other Sources of Wind Data

Southern California Edison Company has maintained a meteorological station at San Onofre since the mid-sixties. Wind speed and direction in hourly averages, as well as the original charts, are available. The data at this station are verified and are better than those at other power plants because of nuclear power plant regulations. Data are available through Stan Marsh (meteorologist) at the Southern California Edison Company.

C.2.3 Other Relevant Data Sources

Summaries of wind data are available in the Department of Water Resources Bulletin 185, and in Goodridge (1979). In addition, climatic summaries available through the National Climatic Data Center (ref. Selective Guide to Climatic Data Sources). Additional data summaries are available in Climatological Study, Southern California Operating Area, Naval Weather Service Command (1971) available on microfiche (NTIS # AD-721-117).

C.2.4 Related Topics

Precipitation hyetographs are generally not available, except those done for specific studies. However, charts or digitized tapes from recording gages are almost always available and can be used to develop hyetographs. The digital tapes have the advantage of allowing computer processing; however, they generally record only to the nearest 0.1 inch.

Historical data for wind are extremely limited in this region, but the problem is not as serious as it is for the northern regions of Southern California, where aeolian transport of sand is a significant factor.

D. Data Gaps and Limitations

There are a number of precipitation gages in this region with extremely long records, but many have records of less than forty years, so that there may not be good coverage with long records. For the most part, the data are adequate.

Many of data available are obtainable through the California Department of Water Resources in both microfiche and digital form. These data include monthly values, intensities, and commonly needed statistical values.

Charts or digitized tapes are almost always available, but developing hyetographs can be a tedious task with charts. Digitized tape on the other hand has a limited accuracy (usually 0.1 inch).

Long-term coastal wind data are not available, as the oldest records (at San Diego) go back only sixty years, and the others are generally much more recent. This is not particularly critical in this region, as wind transport of sand is generally not a significant factor.

As is true in other regions, there is no definitive rain and wind storm history for the region. While there are accounts of some very major storms, especially those resulting in flooding, there is no single source from which can be found an account, with meteorological descriptions, of significant storms in this region. An effort should be made (using newspapers and other sources) to document significant storms (rain, wind and Santa Ana conditions) over as long a period as is possible, and to use available weather maps and other data to compile a storm history of the region. The results could be used in the development of statistics on fire frequencies, the identification of significant features of important storms, and could aid in the development of statistics on coastal wind storms as well as rain storms.

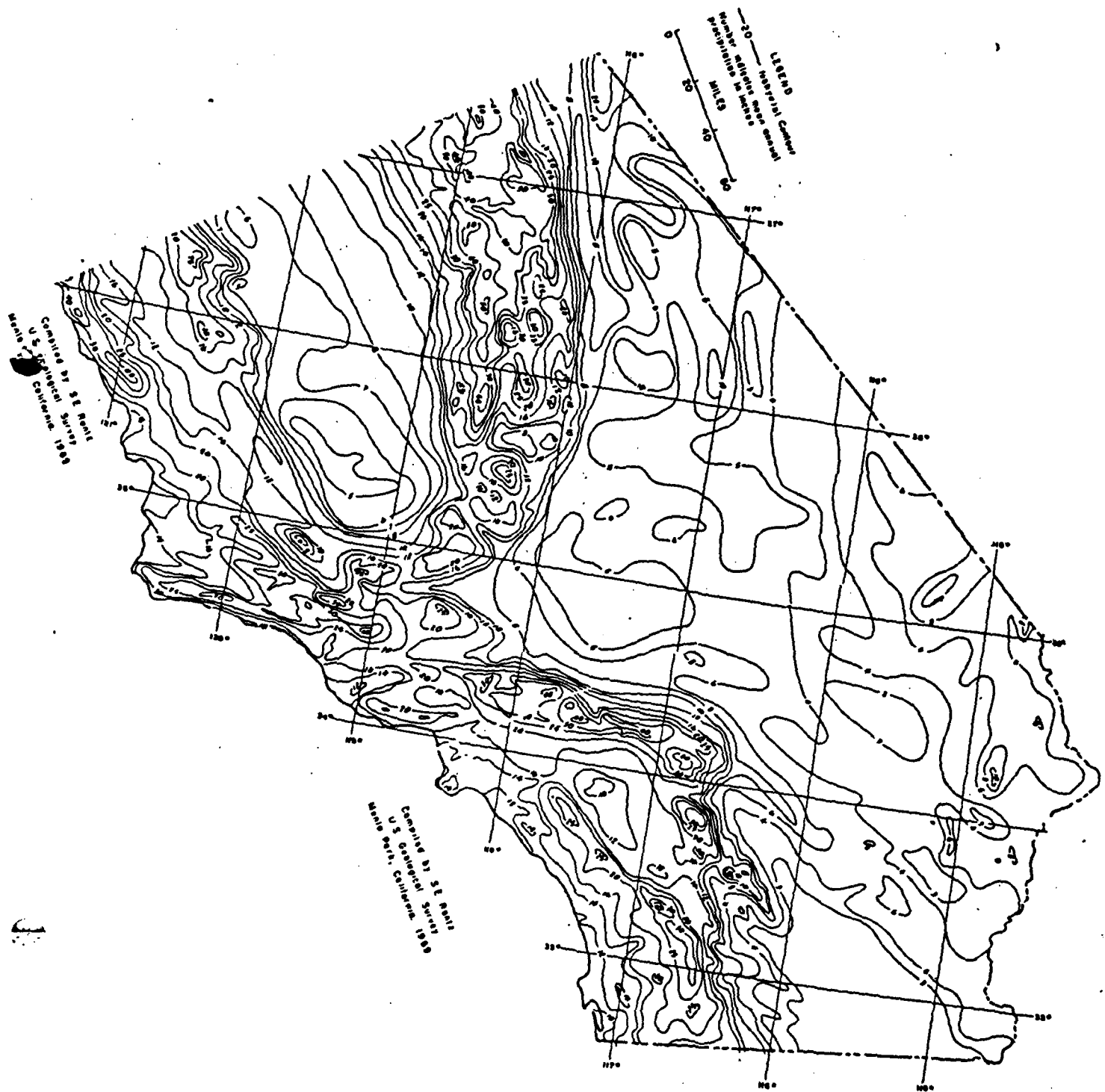
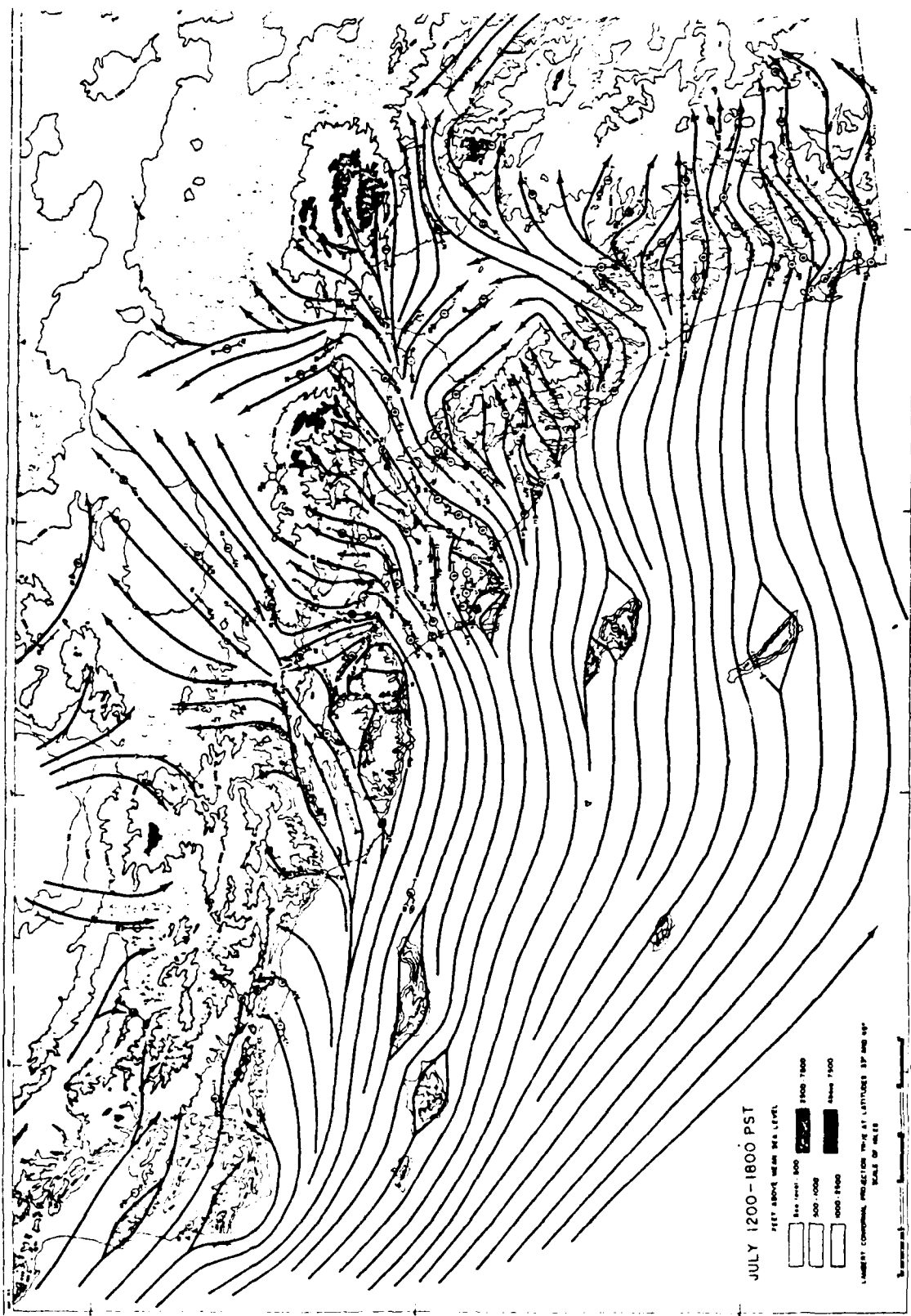


Figure 2.2 Isohyetal Contours, Southern California

Source: Goodridge (1981a)



**Figure 2.3 Typical Summer Streamlines,
San Diego Coastal Region**



**Figure 2.4 Summer Land-Breeze,
San Diego Region
Source: DeMarrais et al. (1965)**

Source: DeMarrais et al. (1965)

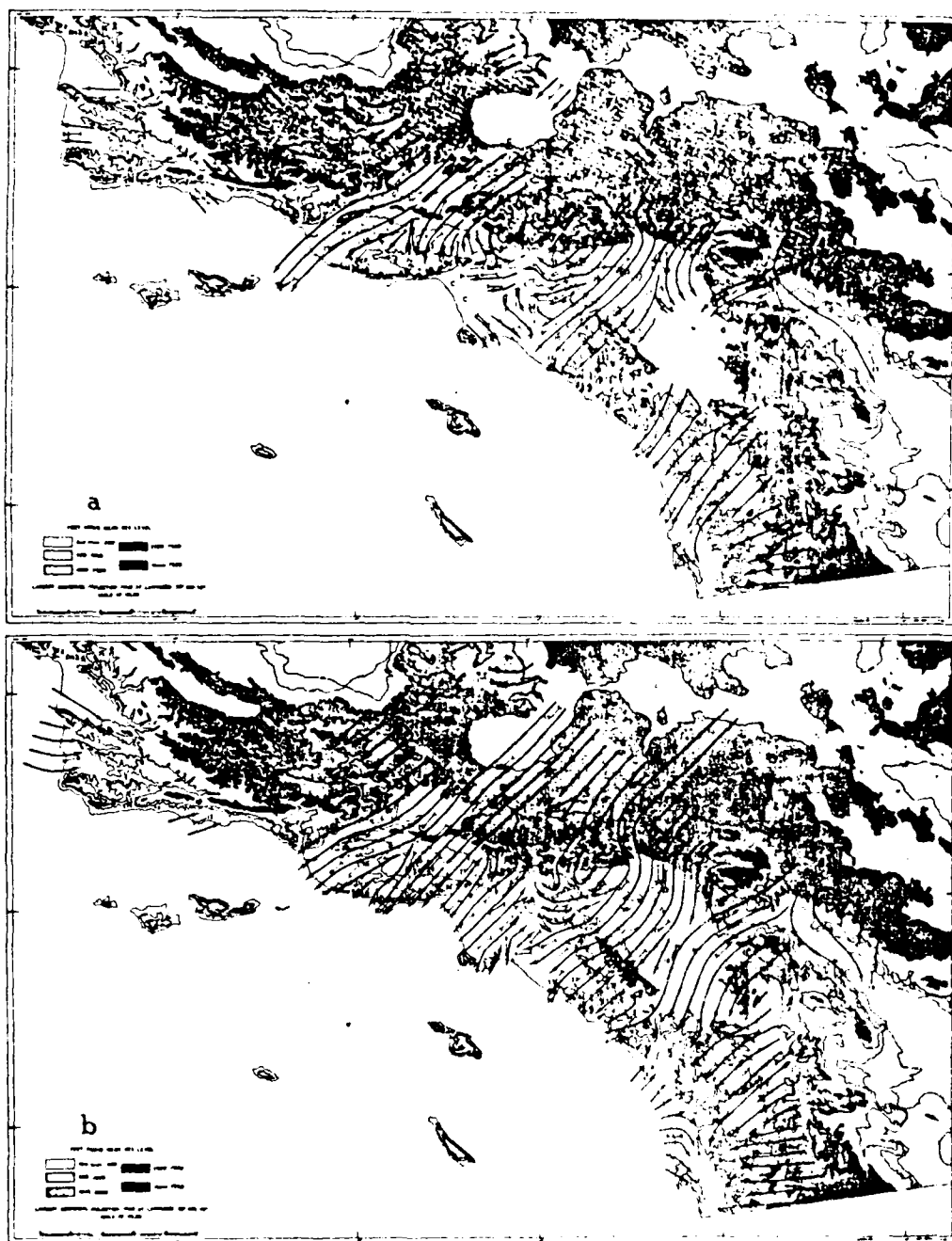


Figure 2.5 Streamlines, Santa Ana Conditions

San Diego Region

Source: DeMarrais et al. (1965)

[illegible]

**Rainfall Record at San Diego, California
(San Diego County Water Authority)**

**Figure 2.6 Cumulative Departure
from Normal Rainfall, San Diego**

TABLE 2.1

Major Drainage Areas of the San Diego Region

Basin or Group	Littoral Cell	Drainage Area mi ²	Controlled Area mi ²	Percent Controlled
Laguna Hills Grp	Oceanside	470	---	--
Santa Margarita R	Oceanside	744	370	50
San Luis Rey R	Oceanside	560	205	37
Escondido Cr Grp	Oceanside	220	---	--
San Dieguito R	Oceanside	346	303	88
San Clemente Cyn Grp	Oceanside S Oceanside R	169	---	--
San Diego R	Mission Bay	432	265	61
San Diego Grp	S Mission Bay Silver Strand	60	---	--
Sweetwater R	Silver Strand	220	182	83
Otay R	Silver Strand	143	99	69
Tijuana R	Silver Strand	1730	1225	72
Total		5094	2649	52

Source: Brownlie and Taylor (1981)

TABLE 2.2

Annual Precipitation at Selected Stations, San Diego Region

Location	Elevation ft.	Precipitation (Inches)			Years of Record	Latitude / Longitude
		Average	Maximum	Minimum		
San Juan Capistrano 7836-51	151	14.4	31.4	4.8	73	33-30-45 117-38-10
Temecula 8840-01	1020	15.2	32.7	4.9	39	33-29-45 117-08-57
Palomar 6657-00	5545	27.8	61.7	10.0	38	33-21-21 116-51-40
Henshaw Dam 3914-00	2700	26.5	52.4	8.3	69	33-14-15 116-45-37
Escondido 2862-00	666	15.7	34.6	6.1	82	33-07-10 117-06-35
Miramar 5707-01	650	13.7	30.0	6.3	53	32-54-00 117-06-00
Cuyamaca 2239-00	4650	38.3	66.5	12.1	93	32-59-20 116-35-15
San Diego 7740-00	13	9.9	26.0	3.4	130	32-43-59 117-10-32
Barrett Dam 0514-00	1624	17.7	36.4	6.8	65	32-40-48 116-40-15

Source: DWR Bull. 230-81

TABLE 2.3

Mean Monthly Precipitation in Inches* at Selected Stations,
San Diego Region

Location	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Palomar	4.9	4.7	4.7	2.5	0.4	0.1	0.4	0.5	0.4	0.8	3.1	4.6
Henshaw Dam	4.2	3.7	3.9	2.3	0.5	0.1	0.2	0.48	0.3	0.7	2.6	3.7
Escondido	2.6	2.2	2.5	1.4	0.3	0.1	.03	0.1	0.2	0.5	1.8	2.4
Cuyamaca	5.6	5.4	6.1	3.7	1.1	0.2	0.5	0.5	0.6	1.0	3.5	5.2
San Diego	1.9	1.5	1.6	0.8	0.2	.03	.01	0.1	0.1	0.3	1.3	1.7
Barrett Dam	2.9	2.5	2.7	1.8	0.9	0.1	.03	.03	0.3	1.0	3.0	4.4

* 1941-1970

Source: Goodridge, (1981)

TABLE 2.4

Average Wind Speed, MPH, San Diego Region

Location	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ave
San Diego	5	5	6	7	7	7	6	6	6	5	5	5	6
Imperial Beach	6	6	6	7	6	6	5	5	4	4	4	5	5

Source: Goodridge (1978)

TABLE 2.5

Percent Wind, Mean Speed, MPH, San Diego Region

Location	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNN	NW	NNW	Calm
San Diego %	6.7	2.2	1.4	0.7	2.5	2.7	3.4	3.2	6.6	5.6	5.2	3.8	9.7	11.1	14.1	6.9	14.2
mean speed	4.4	3.8	3.6	3.4	3.1	3.4	3.9	5.4	5.5	6.0	6.1	6.3	7.2	7.9	7.6	7.6	
Oceanside %	1.6	0.8	18.7	4.5	8.3	0.6	3.1	0.6	4.1	0.9	9.3	2.3	16.0	4.0	11.9	0.4	13
mean speed N.A.																	

Source: Goodridge (1978)

TABLE 2.6

Percent High Wind, Peak Gust San Diego Region

Location	%>17k	%>27k	Peak Gust mph	Month of Max %>17k
San Diego	1.6	0.02	63	Jan (4.9%)
Oceanside	1.7	0.13	N.A.	Jan (4.6%)

Source: Goodridge (1979)

TABLE 2.7

Major Storms in the San Diego Region

Date	Watersheds Affected	Remarks
Dec 1861 - Feb 1862	All	Heavy continuous rain, severe floods.
Feb 1884	All	Continuous rain, severe floods.
Oct 12, 1889	Escondido Co	Severe thunderstorms.
Jan 14-19, 24-29, 1916	All	Two severe storms, heavy floods, especially in the south.
Jan 21-24, 1943	All	Severe storm, heavy floods.
Jan-Feb 1969	Northern	Heavy rains in north of region. 3 storms, well documented. Series of storms, well documented.
Jan-Mar 1978	All	Series of storms, well documented.
Jan-Feb 1980	All	Series of storms, well documented.
Feb-Mar 1983	All	Series of storms.
Sep 30, 1932	Southern	Tropical storm, inland.
Sep 25, 1939	All	Tropical storm, near hurricane.
Aug-Sep 1922	Southern	Tropical storm Hyacinth.
Sep 7-10, 1976	All	Tropical storm Kathleen.
Aug 13-15, 1977	All	Tropical storm Doreen, well documented.
Sep 5-6, 1978	All	Tropical storm Norman, dissipating.

TABLE 2.8 PRINCIPAL RAIN GAGES, SAN DIEGO REGION

STATION	AGENCY	PERIOD OF RECORD	TYPE	DWR #	OTHER #	REMARKS
San Juan Capistrano: Hanke	OC	1924-1978	S	7836-51	(OC) 86	
Fallbrook	SDC	1876-	S,R	2958-50	(SDC) 1050	Changed position several times
Temecula CDF	RC	1902-	R	8840-01	---	
Oak Grove USFS	NWS	1910-	S	6319-00	446-18	
Henshaw Dam	NWS	1912-	R	3914-00	(SDC) 1200	Two stations, data also at SDC Flood Control; Vista Irrigation District
Warner Springs H.S.	NWS	1907-1977	R	9447-00	(SDC) 3636	Two locations, data also available at SDC Flood Control
Escondido	NWS	1894-	S	2862-00	(SDC) 1020	Two locations, data also at SDC Flood Control
Poway Valley	NWS	1879-	S	711-00	134	
Cuyamaca Helix	NWS	1888-	R	2239-00	(SDC) 720	Also available at SDC Flood Control
San Diego NWS	NWS	1850-	R	7740-00	(SDC) 2820	Also available at SDC Flood Control
Campo	NWS	1877-	S	1424-00	(SDC) 420	Also available at SDC Flood Control

Sources: Calif DWR Bulletin 230 -81
San Diego County Flood Control District
Orange County Environmental Management Agency

TABLE 2.9 COASTAL WIND STATIONS, SAN DIEGO REGION

STATION	AGENCY	PERIOD OF RECORD	W BAN #	LAT/LONG		REMARKS
Oceanside	SDAPCD	1973-	---	33 12'10"	117 22'0"	
Chula Vista	SDAPCD	1972-	---	32 37'22"	117 03'22"	
San Diego	SDAPCD	1973-	---	32 43'38"	117 09'13"	
Imperial Beach	NAS	1943-	93115	32 34'	117 07'	Digital 1952-
San Diego	NAS	1922-	93112	32 43'	117 12'	Long hourly record, digitized 1945-
Carlsbad	A	1959-	---	33 08'	117 17'	1972 - hourly
Oceanside	CAA	1931-1952	23181	33 14'	117 25'	1948-52 Digitized
San Clemente	NF	1960-1937-1946	93117	33 01'	118 35'	1960 - Digitized

Source: National Climatic Data Center (NCDC) - latter five stations
San Diego Air Pollution Control District (SDAPCD)

NAS = Naval Air Station
CAA = Civil Aeronautics Administration
A = Aviation Reports

3.0 SOUTH COAST REGION

The South Coast Region includes portions of Los Angeles, Orange, San Bernardino and Riverside Counties. The extent of the South Coast Region is defined by the watersheds draining to the Santa Monica littoral cell, which extends from Solromar to Point Vicente; the South Santa Monica Reach, which covers the area from Point Vicente to Point Fermin; the San Pedro littoral cell, which extends from Point Fermin to just south of the Newport Harbor entrance, and the South San Pedro Reach, which covers the area from the San Pedro Cell to Dana Point. The littoral cells correspond to those defined in the Assessment and Atlas of Shoreline Erosion Along the California Coast (July 1977) and are shown in Figures 3.1 and 3.2, which are reproduced from this document. The following sections give general meteorological information regarding the watersheds draining into these regions.

A. Drainage Areas

A.1 Drainage areas and Subareas

From an historical point of view, there were four distinct watersheds which drained into the South Coast Region. These are indicated on Plate 3.1 as the Los Angeles River Basin, the San Gabriel River Basin, the Santa Ana River Basin and the Santa Monica Mountains Group. However, due to the extensive development and flood control projects in the South Coast Region, only the upper reaches of the San Gabriel and Los Angeles Rivers can still be considered as hydrologically distinct. The lower reaches are channeled, and the two rivers are not entirely independent, since they are connected naturally and, more recently, artificially. For details of the basins and sub-basins, one should refer to the companion report on hydrology.

A.2 Physiography and Topography of the South Coast Region

The watersheds draining to the South Coast Region are bounded on the north and west by the western Transverse Range Mountains, including the San Gabriel Mountains, and the eastern end of the Santa Susana Mountains and the Santa Monica Mountains. On the eastern side, the drainage area is bounded by the Puente and East Coyote Hills and by heavy development. Details of the watersheds are presented in Table 3.1. For further details, one is referred to the companion report on hydrology.

A.3 Climate of the South Coast Region

A.3.1 General Features

The South Coast Region is classified as belonging to the Mediterranean Dry Summer Subtropical climatic type. Along the maritime fringe, temperatures are controlled by the sea, with average winter air temperatures of 52° F and average summer temperatures near 71° F. Inland summer temperatures are much higher, with summer highs commonly over 90° F, while winter daytime temperatures are only occasionally below freezing in the mountain areas.

An important part of the climate of this region is the formation of low stratus clouds and fog along the coast, especially during night and morning hours. Low overcast conditions normally prevail on 20 to 25 mornings per month from April to October although there are great year-to-year variations in the persistence of this phenomena. Low clouds and fog are usually less prevalent along the South Coast Region than they are north of Point Arguello.

A.3.2 Typical Storm Patterns

The main synoptic feature controlling the weather in this region is the eastern North Pacific High, which in summer is generally strong and in a more northerly position, preventing storms generated in the North Pacific from moving far south. In contrast to the summers, in which frontal precipitation is rare, the Pacific High is generally weaker and in more southerly position in winter, thus allowing storms to penetrate to Southern California.

The typical winter storms which affect this region usually originate in high or mid-latitudes and approach from the northwest, west and southwest. The nature and general approach of these storms help produce conditions which yield the strong orographic effects in the rainfall patterns observed in this region. The two main types of storms which affect the area are the high-latitude type, in which blocking takes place east of 160° W and the storms approach from high latitudes, and the low-latitude type, in which blocking takes place between 160° W and 180° W, and storms, which often develop in the Hawaiian region, and which approach at lower latitudes.

Tropical storms are extremely rare, but can move into the area on occasion. These rare storms can cause intense rainfall (Kimura, 1974). The eastern Pacific tropical storms remain a threat to the area, although they rarely arrive in full force because of the upwelling along the coastal region which usually maintains a band of cold water near the coast. One did strike with near hurricane intensity in late September 1939, and dumped 2 to 4 inches of rain along the coast and up to 10 inches in the mountains. Another tropical storm, Kathleen in September 1976, produced up to 14 inches of rain in the San Bernardino Mountains. However, most arriving tropical storms are in the dissipation stage because of the cold water, and their intensities are reduced. This was the case with tropical storms Doreen and Norman in 1977 and 1978, which produced thunderstorms and locally heavy rain in the South Coast Region.

There is occasional rainfall from thunderstorms, but this is generally rare and usually limited to late summer and early fall. The Pacific High normally prevents moisture laden air from entering the region in summer, but occasionally, the Pacific High weakens or displaces and allows an inflow of subtropical air. As a result, thunderstorms may occur, especially in the mountain and desert areas. (U.S. Weather Bureau, (1962) Hydrometeorological Report 37).

A.3.3 Precipitation Patterns

The distribution of average annual precipitation varies considerably over the South Coast Region. A glance at a map showing isohyetal contours of mean annual precipitation, such as that reproduced in Figure 3.3, shows that there are strong orographic effects. The isohyetal contours could almost be contours of elevation, especially in the coastal watersheds. Table 3.2 shows typical values for this region.

In the near-coastal region, mean annual precipitation varies from low values

near 12 inches near the mouths of the Los Angeles, San Gabriel and Santa Ana Rivers, to 18 inches at the base of the Santa Monica Mountain Range. The difference is due to orographic effects, as the air masses are lifted over the Santa Monica Mountains in the usual storm patterns. One also sees a slightly higher average in the Palos Verdes peninsula, which is at a higher elevation than the surrounding plain.

Inland patterns also follow topography with typical values of 16 to 20 inches in the valleys and foothills, rising to as much as 40 inches in the mountain peaks. The Santa Monica Mountains, much lower than the San Gabriel and Santa Ana Mountains, have an average annual rainfall of about 20 inches.

In order to emphasize the importance of orographic effects, it is noted that the offshore areas have a typical annual average of about 10 inches. At San Nicolas Island, the value is only 7.5 inches. More northerly areas have slightly higher averages (Kimura, 1974).

It should be noted that the year-to-year variation in rainfall is large, as can be seen from the extreme values noted in Table 3.2. This variation is an important factor in the overall precipitation patterns of this region.

A.3.4 Seasonal Precipitation

While year-to-year variations are large, seasonal variations are also pronounced, as can be seen in Table 3.3. Rainfall rarely occurs in the months of June, July and August, largely because of the blocking effect of the semi-permanent Pacific High upon frontal systems. Thunderstorms occur occasionally in summer, if the Pacific High weakens and allows moist tropical air into the region. In general, thunderstorms are more intense and more frequently observed in mountainous areas. Most rain, however, is associated with winter cold fronts.

A.3.5 Precipitation frequency

Precipitation frequency for given intensities and durations is important in this region because of the intermittent nature of precipitation, and the large year-to-year variation. There are two excellent sources of data. One is the NOAA Precipitation-Frequency Atlas of the Western United States, Volume XI-California. This atlas provides isopluvial contours for 6-hour and 24-hour precipitation with 2-year to 50-year return periods.

The second source is the California Department of Water Resources publication "Rainfall Depth-Duration-Frequency for California" (1981). This publication contains measured intensities and depth-duration-frequency tables for many stations in California.

In general, the intensities are dependent upon elevation, with the lowest near the coast and highest in the mountain areas. For detailed information, the reader is referred to the above sources.

A.3.6. Coastal Wind Regime

The basic airflow in this region is northwesterly, which is due to the eastern Pacific High. This high is dominant in summer, but moves south and weakens in winter. Winter winds are still primarily from the northwest, but are modified by passing fronts and other meteorological disturbances. East and southeast winds are common as fronts approach, and often veer south or southwest with the storm passage. Figure 3.4 shows average wind rose patterns for January and July in the coastal region. The strong westerlies are apparent in the summer months, while the near-coastal wind patterns are typically more uniform in winter.

A second important factor in wind patterns is the Catalina Eddy, which is a cyclonic cell formed by the northwesterly flow past Point Conception. The flow recurves due to the eddy and causes southwesterly and southerly winds in the coastal region, rather than the northwesterly flow. The Catalina Eddy also helps produce the local stratus cloud formation, and when the eddy is intense, low clouds often develop over the coastal area.

A.3.7 Land-Sea Breeze

An important factor in wind regimes in Southern California is diurnal variation. This variation is caused by seasonal land freezes which typically develop throughout the year. The onshore sea breezes are caused by the heating of the land during the day, while the offshore land breezes are caused by land cooling at night. In both cases, the relatively constant ocean temperature is a factor.

There is a strong seasonal variation in the diurnal pattern as well (DeMarrais, et al., 1966). In summer, the strong land heating results in a strong landward pressure gradient, and a strong sea breeze during the day. In winter, the land surface radiates heat at night, and strong land breeze develops. The land breeze in any case has a limited effect; outside the Channel Islands, the air flow is little changed. Typical diurnal streamline patterns are shown by DeMarrais et al. (1966). There are several other regimes which dominate the coastal winds. One is caused by a warm-core high pressure over the Great Basin and is common in winter. This pattern is accompanied by clear skies and often results in the above-mentioned winter diurnal land-sea breeze pattern.

A.3.8 North Pacific Storm Winds

The basic wind pattern is altered by the passage of Pacific storms most of which arrive in the winter months with active weather fronts. Most fronts are either occlusions or cold fronts, but the occlusions tend to acquire the characteristics of a cold front as they move southwestward over Southern

California (DeMarrais et al., 1965). Although there is no single typical flow pattern associated with fronts, there are often strong, and sometimes damaging, easterly or southeasterly winds as the fronts approach. This wind can attain 30 mph or more, but this is an infrequent occurrence. With the passage of the front, winds veer toward the southwest.

Storms associated with warm fronts are much rarer, and are usually associated with low-latitude type storms. Winds on the order of 20 to 25 mph are not unusual during the passage of these fronts, and sustained winds can often be much higher.

A.3.9 Santa Ana Winds

A cold-core high pressure over the Great Basin, commonly occurring after the passage of a cold front, will often result in Santa Ana, or foehn, wind type conditions. These winds are often strong, and sometimes extremely intense and damaging. The general flow pattern results in strong north to northeast winds, with extremely high velocities in canyons. Bailey (1966) reports an intense Santa Ana in 1918 which produced northwest winds of over 60 mph (26 m/s) at Santa Monica for five minute intervals. In fall, the winds are often hot and dry, causing extreme fire danger. Although quite rare during summer months, Santa Anas, when they do occur, can produce extraordinarily hot and dry conditions, with exceedingly high fire danger.

A.3.10 Winds and Severe Weather

Although much rarer than damaging Santa Ana winds, thunderstorms occasionally develop and bring severe weather to this region. Severe weather is least reported in summer (DeMarrais et al., 1966) and nearly always occurs inland from the coast during this season. Fall severe weather is relatively more common, especially on the coast.

Aside from intense Santa Ana winds and thunderstorms, tropical storms are a possible, though rare, occurrence. The tropical storm in 1939 brought 60-knot winds to the Los Angeles coast. As mentioned previously, however, tropical storms arriving in this region are usually in the dissipation stage and are reduced in intensity.

Tornadoes are also an infrequent occurrence in the area, but according to Goodridge (1979), the frequency in Los Angeles is more than ten times the frequency in the state as a whole. Goodridge believes this is in large part due to the fact that tornadoes, rare in California, are more often observed, reported and recorded in populated areas. Tornadoes have the highest frequency in spring and have a secondary peak in October. Most, however, touch ground only for very short periods (Daily, et al., 1974)

A.3.11 Topographic Effects on Wind

The single, largest topographic feature which affects the wind in this region is the change in coastline alignment at Point Conception. With the prevailing northwesterly winds, the sudden change to an east-west coastline produces a recirculation zone in the South Coast offshore area. Often centered over Catalina Island, this recirculating zone is known as the "Catalina Eddy". The cyclonic flow causes southwesterly to southerly winds along the coast at times, depending on the strength and location of the eddy. This eddy, when intense, can cause a deepening of the marine layer, and often results in overcast days in spring and early summer.

Locally important topographic features (Point Conception is well outside of the South Coast Region) include the Santa Monica Mountains, Palos Verdes Peninsula and the offshore islands (including those in the Santa Barbara Channel, which are also outside the region). The alignment of the islands essentially "funnels" the flow along the coast. The hills and cliffs of the Palos Verdes peninsula cause a flow separation resulting in a shadow effect in their lee, often in the Los Angeles Harbor area. The Santa Monica Mountains are relatively high and situated on the coast, so that the usual flow pattern is directed around them. However, the canyons in the Santa Monica Mountains are favorable to intense funneling of winds in Santa Ana conditions, which can result in locally intense winds on the coast.

A.3.12 Coastal Wind Intensities and Frequencies

Table 3.4, 3.5 and 3.6 summarize wind intensities and frequencies in the South Coast Region. These data are taken from Goodridge (1978) and Goodridge et al. (1979).

There is a moderate seasonal variation in wind speed (Table 3.4), but the most interesting feature is the strong probability of southwest winds at Malibu and the west to northwest winds at Long Beach (Table 3.5) reflecting topographic effects as well as the prevailing northwest flow of air. Note also that the frequency of high winds in February (the month of most frequent high winds) is only moderately higher than the annual average.

B. Historical Perspective

B.1 Historical Outline of Major Wet and Dry Periods

The most comprehensive treatment of the historical rainfall record prior to recorded measurements (which start as far back as 1847) was done by Lynch (1931). Recent work with tree-ring data by Fritts and Gordon (1980) attempts to extend the record back to 1600. However, most of their paper is devoted to attempts at verifying the data, a difficult task when typical regression coefficients are on the order of 0.5. Certain trends may be found in their results, but one must use caution in assigning a quantitative value to rainfall and runoff derived from tree-ring measurements.

Probably the most interesting feature of Lynch's research is that the South Coast Region has often experienced extended drought and wet periods, on the order of ten years or so, since 1769. However, major floods have often occurred during drought periods, and, conversely, years of very little precipitation have occurred during wet periods.

Lynch found that the periods of 1781 to 1810, 1822 to 1832, 1842 to 1883 and 1893 to 1904 were periods of below average rainfall, and could be considered drought periods. Figure 3.5 shows the rainfall record since 1870 at Los Angeles, where it is seen that the period of 1944 to 1976 was also a drought period.

By way of contrast, the wet periods noted by Lynch were from 1810 to 1821, from 1883 to 1893, and from 1904 to 1922. To this, we might add the period of 1935 to 1944 and, perhaps, the last seven years, although the historical record should caution one from making historical judgments based on short records.

The extreme variability must be noted, however. Lynch cites many examples; one is the 1839-40 season, in which intense rains were followed by 18 months of almost entirely rainless weather. The 1970-76 dry period was followed by the extremely wet years of 1977-78 and 1979-80.

B.2 Historical Outline of Major Rain and Wind Storms

Historical accounts of major storms are of a quantitative nature only during the more recent years, but some early storm descriptions are found. Kuhn and Shepard (1981) recount the writings of Richard Henry Dana, who described the southeasters of the 1830's, and their ferocious effects. Fifty-foot waves and violent winds were described, but general weather conditions which apparently caused the southeasters are no longer present (Kuhn and Shepard, 1981). Table 3.7 lists some of the major storms which have affected this region.

B.2.1 Rain Storms

More recent accounts go beyond the qualitative descriptions of the 1800's, which in general focus on the number of days of rain, or the intense wind and waves. Recent accounts, however, tend to follow economic losses; thus synoptic accounts are generally available only for storms in which damaging floods occurred. A consequence of this is that short, intense storms are often analyzed, since these sometimes result in local flooding, as occurred on December 30-31, 1933 in La Crescenta (Kraebel, 1934). This flood, partly a result of fires in the high gradient canyon areas, was caused by fourteen hours of rain followed by an intense fifteen minute cloudburst.

Burke (1952) and Carr (1952) give an account of the three-day (January 15-18) 1952 storm. The 1969 storms (January 18-22, 24-27, and February 22-25) have been reported extensively (Waananen, 1969; Los Angeles County Flood Control District, 1969).

A storm with unusually small orographic precipitation effects for this region is discussed by Nestlinger (1975). This storm (December 4, 1974) had 10-, 15- and 30-minute intensities which were not extreme, but the 3-hour intensity was of the 100-year recurrence level.

Pappas (1978, 1980) and Garza and Peterson (1982) give synoptic accounts of the series of storms of the 1977-78 winter and 1979-80 winter.

B.2.2 Wind Storms

Wind storms get somewhat less attention in this region, since the economic damage is generally much less severe than that caused by floods. There are several notable wind storms. The intense Santa Ana wind of November 24-26, 1918 had sustained winds of 60 mph (Bailey, 1966). Bailey also notes that 60-mph winds were measured in a January 11-13, 1946 windstorm.

Santa Anas, a common occurrence and creators of severe fire potential, have been discussed by Sergius (1962) and Aronovitch (1966). Both give details of particular storms: Sergius discusses the Santa Ana conditions which led to the 1961 Bel-Air fire, and Aronovitch discusses the January 15-16, 1966 Santa Ana. Sommers (1981) gives details of the synoptic conditions during the November 14-16, 1977 Santa Ana wind and fire conditions.

C. Data Search and Retrieval Efforts

C.1 Technical Approach

Data were collected from a number of governmental and public organizations. Previous reports and documents on similar topics were located and examined as part of the literature search. These documents often contained or referred to data, whose original sources were noted. Government and public agencies were then contacted, and in many cases visited.

The following is a general description of data sources relevant to the South Coast Region.

Los Angeles County Department of Public Works (Formerly Flood Control District)

The data available at this agency include:

Precipitation data, with both hourly and the original charts or punch tape from recording gages;

Streamflow data, with both daily and charts or punch tape from recording gages;

Debris data, including hand-entered tables of the quantities of debris stored and removed from debris basins;

Fire history, including topographic maps with outlines and dates of fires from about 1910 and reports on recent fires (older fire reports are archived).

Streamflow and precipitation data are on microfilm up to 1977. The most recent publication covers the 1975-77 period.

People contacted include:

John Mitchell, Head, Operations Section (213) 226-4190

Don Carpenter (rainfall), Hadi Nourzi (fires, debris) (213) 226-4184

Tom Alexander (fires, debris), Ed Dingman (streamflow),

Bob Sarasua (streamflow records) (213) 226-4184

Chris Bredehorst (frequency analysis) (213) 226-4089

Orange County Environmental Management Agency

The data sources at this agency include:

Precipitation data with both hourly tabulations and charts from recording gages;

Streamflow data, with both daily tabulations and charts from recording gages;

Debris data is limited, but a new program on the San Diego Creek is starting;

Sediment data is collected in conjunction with the U.S.G.S.

In a new program just starting, the agency will collect its own data. The sediment data are on a computer data base.

The most recent publication covers the 1982-1983 season.

People contacted include:

Emmett Franklin (streamflow, precipitation) (714) 634-7473

Bob Collicott (sediment, water quality) (714) 634-7463

Tom Rossmiller, Bruce Moore (sediment, water quality)

Dale Dillon (debris, channel cleanouts) (714) 634-7424

San Bernardino County Environmental Public Works Agency, Department of Flood Control and Transportation.

Relevant data include:

Precipitation data, with both hourly data (tabulated) and charts available. These data are presently being put on a computer data base, and some are available in electronic form as well.

Fire maps are kept, with fires located on topographic maps.

The most recent publication covers the 1974-76 seasons.

People contacted include:

Art Luther (Asst. Chief, Water Resources Division) (714) 383-2389

Peter J. Rusher (Sr. Hydrologist) (714) 383-2926

Riverside County Flood Control and Water Conservation District

Relevant data at this agency include:

Precipitation data, with both hourly tabulations and charts from recording gages available. In addition, most data are on a computer data base and are available in printouts and electronic form.

Debris and sedimentation data are limited, since the county has few debris basins.

The most recent publication covers the 1979-81 seasons.

People contacted include:

Kathy Carter (Hydrology) (714) 787-1264

Tom Clem (Hydrology) (714) 787-1264

Eric Geibersen (Dams, debris basins) (714) 787-2015

Metropolitan Water District of Southern California

This agency maintains about three rain gages in the study area; more were set up during the 1976-77 drought. Data are available through the California Department of Water Resources.

People contacted include:

Richard Clemmer, Richard Kemsel (213) 250-6210

California Department of Water Resources

Data from this agency include:

Streamflow, with data available in the Water Data Information System (WDIS). Data are available on microfiche (least expensive) and electronic form.

Precipitation, also available on WDIS.

Wind data are available in limited form, as they are gathered only in conjunction with particular contracts.

People contacted include:

Bill Mork, State Climatologist (916) 445-5800

California Air Resources Board

Data available from this agency include limited wind data, although the agency now maintains few stations relevant to this study. Occasional measurements are made in conjunction with particular projects. Some data are received from Air Pollution Control Districts, but are more readily available from these agencies.

People contacted include:

Dale Secord, John Kinney and Art Lorenzen (Sacramento) (916) 322-6206

South Coast Air Quality Management District

Relevant data available from this agency include wind data from coastal stations.

People contacted include:

Joe Casmassi, Head Meteorologist

Southern California Edison Company

This organization maintains wind monitoring equipment at the San Onofre Nuclear Generating Station (S.O.N.G.S) as well as at the Oxnard, Ventura, El Segundo, Los Alamitos and Huntington Beach coastal power plants. Except at S.O.N.G.S., data are of questionable value.

People contacted include:

Stan Marsh (Meteorologist) (818) 302-1189

Los Angeles Department of Water and Power

This organization maintains wind monitoring equipment at the Scattergood (El Segundo) and Haines (Huntington Beach) power plants. Data are of questionable value.

People contacted include:

Kevin McAvoy (213) 481-6037

National Weather Service, Los Angeles

Data available from this agency include coastal wind speed and direction

with hourly and three-hourly averages. The hourly data are reported to the National Climatic Center. The three-hourly data are kept for several years, then discarded (these data are from harbor masters and lifeguards). Data are in tabular form.

People contacted include:

Art Lessard (Chief Meteorologist) (213) 209-7215

Other individuals contacted include:

Robert de Violini, Climatologist, Pacific Missile Range, U.S. Navy, Pt. Mugu; (805) 989-8383

Don Tuttle, Humboldt County Public Works, Natural Resources Division (Coastal Storm History); (707) 445-7741

Gerald Kuhn, Scripps Institution of Oceanography, (Coastal History); (619) 452-4856

Prof. Gary Griggs, University of California, Santa Cruz (Coastal Storm History); (408) 429-2403

There are several reference libraries in the South Coast Region which are extremely helpful. These include:

University of California Los Angeles, Water Resources Archives, Beth Willard, Librarian (213) 825-7734

This reference library has an extensive collection of publications, manuscripts and material relevant to this study. There is a large collection of uncataloged documents from local agencies as well. In addition, material not available at the UCLA Water Resources Archives can usually be obtained from the University of California, Berkeley through UCLA. Sources are well cataloged and easy to find.

California Department of Water Resources, Southern Division, Los Angeles

The records and documents section combine an extensive collection of California State publications. In addition, there is a large collection of relevant documents and publications from local and federal agencies, including the County Flood Control Agencies. Sources are well cataloged and easy to find.

California Institute of Technology Libraries

Extensive collection of relevant journals and some federal and state publications. The best sources are the Environmental Engineering Library, Keck Laboratory, and the Engineering Library (Millikin Libraries). Unfortunately, the collections are spread out over several buildings and a

certain amount of searching is often required.

University of California, Los Angeles Engineering Library and Geology Library

These two libraries have extensive collections of relevant journals. The Engineering Library has vast holdings of Weather Bureau/Weather Service publications. The geology library has all relevant U.S. Geological Survey Water-Supply Papers (as do the Water Resources Archives, where they cannot be checked out) and other U.S.G.S. publications. Both are excellent sources for reference material.

National Weather Service, Wilshire Federal Building

The reference room (normally closed to the public) has an extensive, uncataloged collection of relevant publications, including out-of-print publications and unpublished documents. Wind data are also available.

U.S. Army Corps of Engineers, Los Angeles District, Library

This library has most Corps of Engineers publications, including Beach Erosion Board and CERC publications. Some publications from local and state agencies are also available, as are some U.S.G.S. Water-Supply Papers and Water Resources Data. References are often miscataloged and difficult to find.

Southern California Metropolitan Water District

The reference library has (in theory) all MWD publications, although relevant ones often seem to be missing. In addition, there is a good collection of California Department of Water Resources publications.

C.2 Meteorological Data Available

Tables 3.8 and 3.9 list some significant rainfall and wind gages in this region. These tables are provided as a quick reference; more detailed and complete lists appear in Appendix B.

C.2.1 Precipitation

There are more than 1000 present and discontinued precipitation gages in the South Coast Region. Of these, most are operated by the Los Angeles County Department of Public Works (formerly Flood Control District), the Riverside County Flood Control and Water Conservation District, the San Bernardino County Flood Control and Water Conservation District and the Orange County Environmental

Management Agency. Table 3.8 lists some gages with very long records. The following is a description of the data sources.

C.2.1.a. Los Angeles County Department of Public Works, Hydraulic Division

This agency keeps over 400 rain gages, as well as records on many discontinued gages. Records go back to 1872. Records prior to 1978 are available on microfilm, including hourly tables and charts from recording gages. (Examples of data available are included in Appendix B.) All daily measurements are available in tabular form, as are intensity-duration data. The intensity-duration data are updated regularly, although the last publication from the agency was issued for the 1977 water year. Charts and digitized tape from recording gages are also available. It should be noted that a large number of gages were installed around 1930; the region is well covered with gages of more than 50-year records.

Because of a legal matter, all data from stations between Topanga Canyon and Malibu Creek, from the coast to the top of the watershed are unavailable unless prior permission is obtained from the Los Angeles County District Attorney (John Mitchell, 1985, personal communication).

C.2.1.b Riverside County Flood Control and Water Conservation District

This agency maintains over sixty rain gages in this region. All recent data and most historical data are now available on a computer data system. These data include daily totals and intensity-duration data. Charts are maintained and are available. Because of the computer data system, data can be obtained rapidly by specifying the station and period of record. A list of stations is included in Appendix B.

C.2.1.c San Bernardino County Flood Control and Water Conservation District

This agency maintains over 200 rain gages, of which about 150 are in this region. Data are presently being entered on a regular basis, but most are available only in tabular form. Data include both daily amounts and intensity-duration data. All charts or digitized tapes are maintained and are available. Relevant gages are listed in Appendix B.

C.2.1.d Orange County Environmental Management Agency

This agency maintains records on more than seventy rain gages in this region. Data are available in tabular form. Charts are maintained from

recording gages and are available. Some analyses are made for intensity-duration records. Relevant gages from this agency are listed in the Appendix.

C.2.1.e National Weather Service

Hourly precipitation data for National Weather Service recording gages are now available on microfiche and magnetic tape for the period from 1940 to the present. In addition, fifteen-minute recordings from 1971 to the present are available on magnetic tape. The hourly data, as well as daily, monthly and annual data, are available from the National Climatic Data Center. The complete list of data available is lengthy, and will not be repeated here. For reference, see the Selective Guide to Climatic Data Sources, Hatch (1983).

C.2.2 Wind Measurements Along the Coast

Wind instruments with reasonably long records are listed in Table 3.9. One record (Los Angeles Airport) extends back to 1930. In addition, there are a number of stations with records back to the mid-1950's. The following is a discussion of the data available.

C.2.2.a National Climatic Data Center

The records of the first three stations listed in Table 3.9 are available on microform and, as indicated, on magnetic tape. Exact details of all the data available in addition to wind data can be found in the Index of Original Surface Weather Records, National Climatic Data Center.

The most complete station in this region is that of Los Angeles Airport, where hourly data are available from 1937 to the present.

C.2.2.b South Coast Air Quality Management District

Wind data from several coastal stations are available from this agency. Those with the longest records are listed in Table 3.9, although there are several others with shorter records. Data are available from most stations on a computer file up to 1975. Recent data are tabulated, and there are gaps in some records. A list of all stations and the records available is presented in Appendix B.

C.2.2.c Other Sources of Wind Data

The National Weather Service in Los Angeles receives wind data three to

eight times per day from harbormasters and lifeguards. These data are tabulated and maintained for about five years.

Southern California Edison and the Los Angeles Department of Water and Power maintain wind instruments at power plants on the coast. These data are available, but are unverified, and are in "raw" form (i.e., on strip charts).

C.2.3 Other Relevant Data Sources

Summaries of wind data are available in the California Department of Water Resources Bulletin 185, Goodridge (1978), and in Goodridge et al. (1979). In addition, climatic summaries available through the National Climatic Data Center (ref. Selective Guide to Climatic Data Sources). Additional data summaries are available in Climatological Study, Southern California Operating Area, Naval Weather Service Commands, (1971) available on microfiche (NTIS # AD-721-117). In addition, data records and summaries are available for Point Mugu (Robert de Violini).

C.2.4 Related Topics

Precipitation hyetographs are generally not available, except those done for specific studies. However, charts or digitized tapes from recording gages are almost always available and can be used to develop hyetographs. The digital tapes have the advantage of allowing computer processing; however, they generally only record to the nearest 0.1 inch.

Historical data for wind are extremely limited in this region, but the problem is not as serious as it is for the northern regions, where aeolian transport of sand is a significant factor.

D. Data Gaps and Limitations

This region is well covered with precipitation gages, many with more than fifty years of data. The problem is not one of data gaps, but more of the possibility of being overwhelmed by the quantity of data available.

Fortunately, the California Department of Water Resources has monthly measurements on microfiche for many of the stations (these are being submitted under a separate cover). Also available are depth-intensity-duration data, as well as statistical analyses of many commonly needed values. Most of these data are available on magnetic tape as well.

Charts and/or digitized tapes from recording gages are, in almost all cases, cataloged and archived. Obtaining data from charts is a difficult, and time consuming task, but is more accurate than the digitized tape, which usually records to the nearest 0.1" (usually the precision is +0.1", -0.0").

The historical wind patterns are known only for the past fifty years at one station (Los Angeles Airport). The coast has been well gauged since the mid-1950's, and data are often available in digital form.

Historical trends in rain and wind storms is an area that needs study. There is no definitive historical account of these storms. Many recent rainstorms are identified and well documented in this region, but there is no single source from which one can find a good meteorological summary of the major rainstorms. The situation for windstorms is even worse, with very few windstorms even crudely documented. In both cases, an effort should be made to identify major storms (and even large or moderate storms for comparison) using available documents such as newspapers for as long a period as can be covered, and then to use available daily weather maps and (for more recent storms) satellite photos, to compile a storm history of the region. This in itself would be a lengthy task, but an important contribution. An especially important part would be the identification of Santa Ana wind conditions (as many as can be accounted for with both weather maps and newspapers). This could be used to identify trends in Santa Ana conditions (intensities, frequencies, seasonal distribution). The data could also be used to aid in fire frequency predictions.

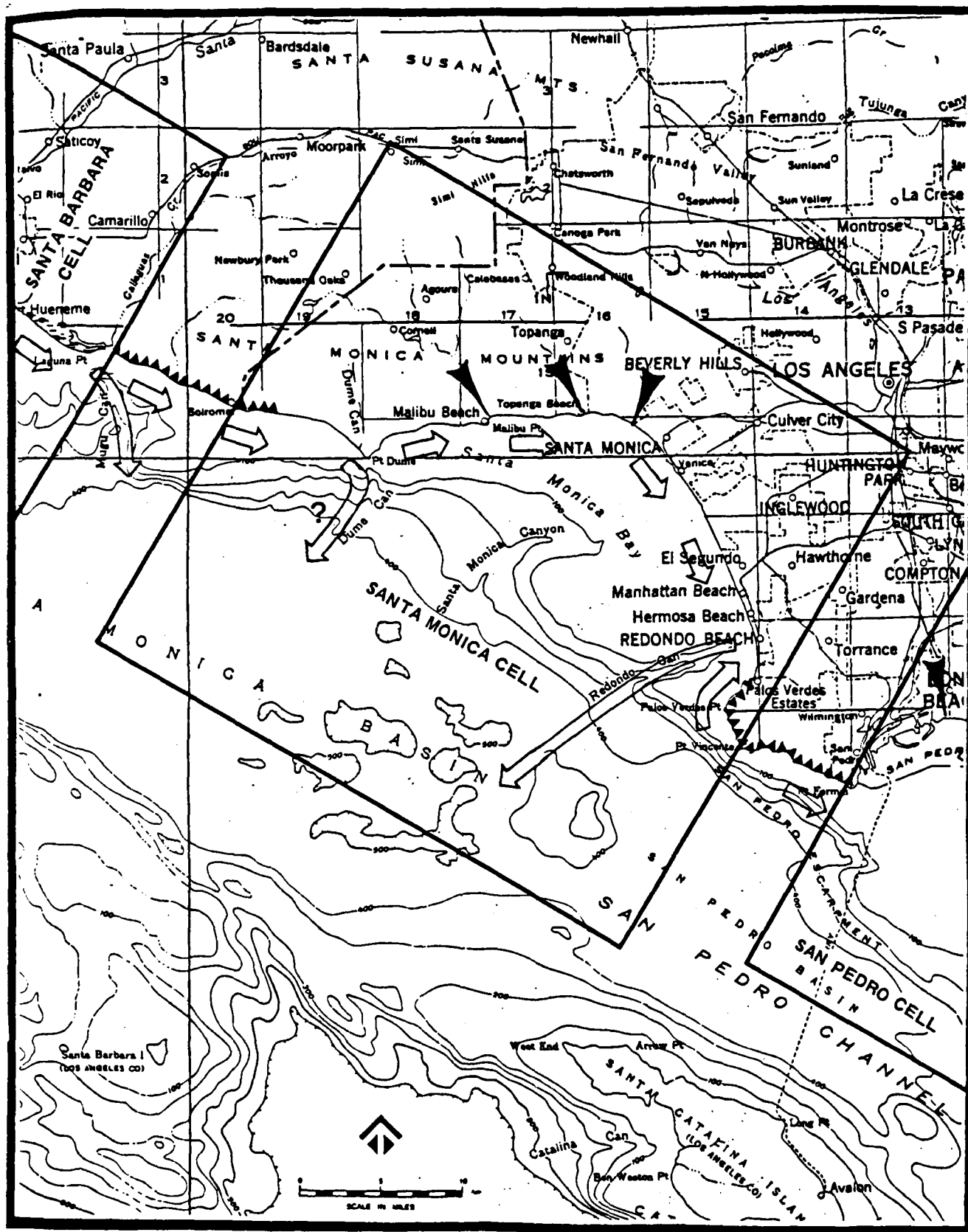


Figure 3.1 South Coast Region

Source: Calif. DNOB Atlas of Shoreline Erosion

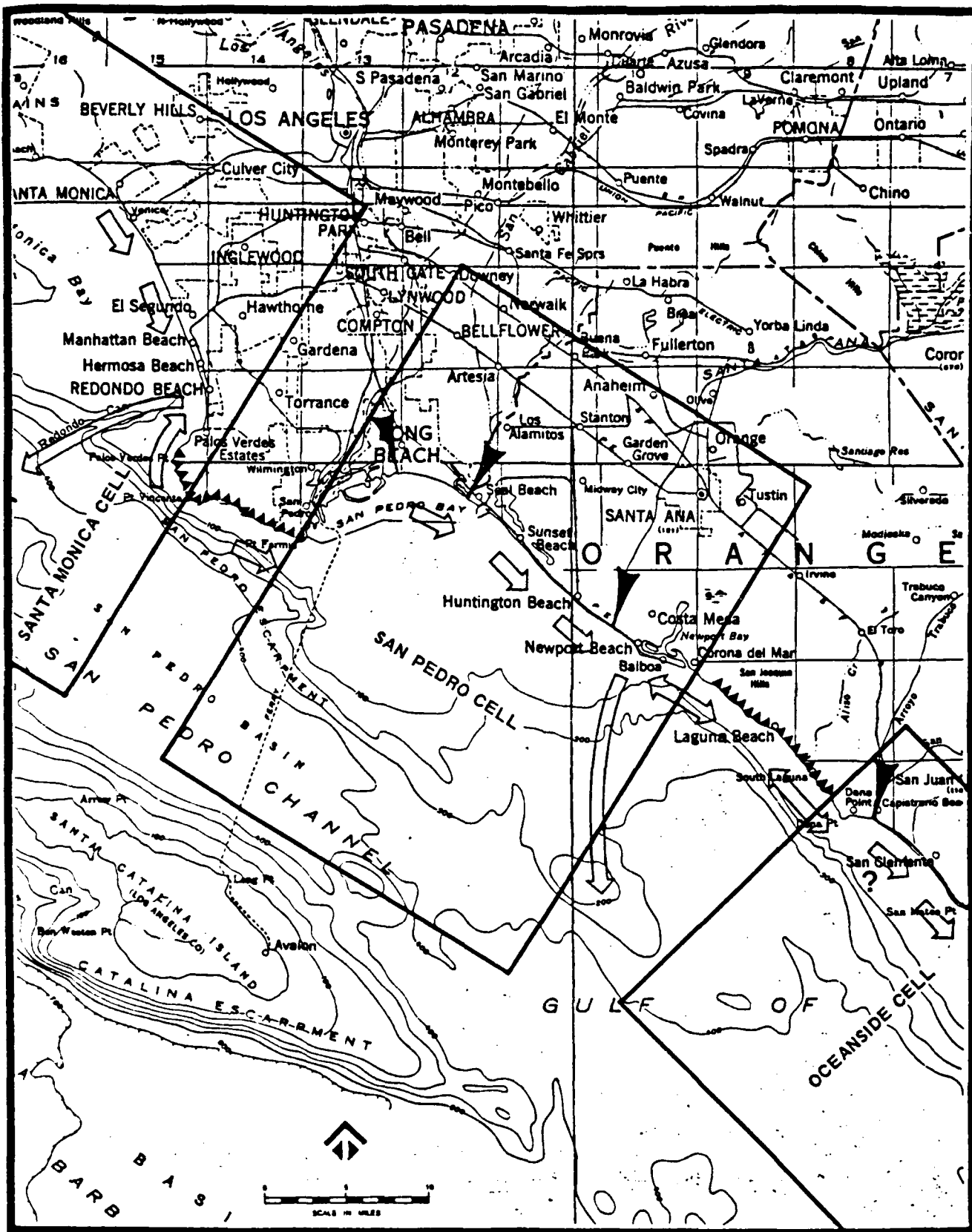


Figure 3.2 South Coast Region

Source: Calif. DNOB Atlas of Shoreline Erosion

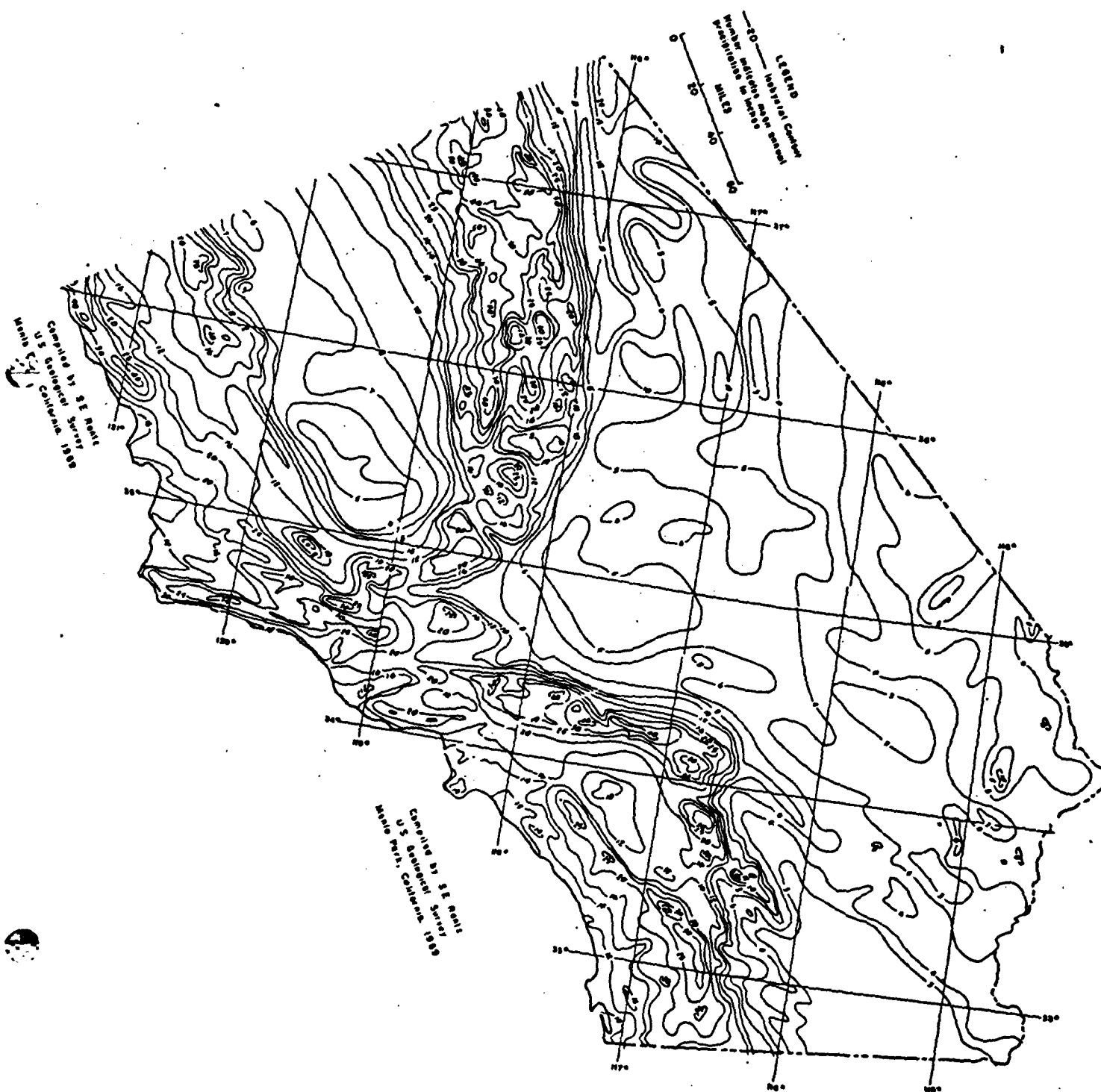
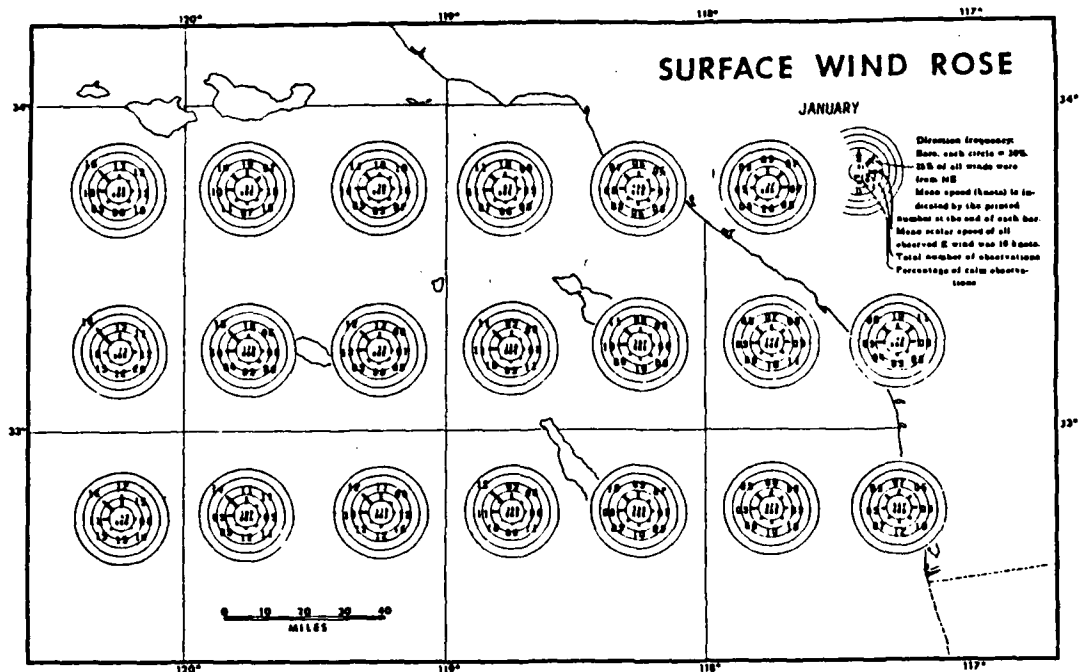
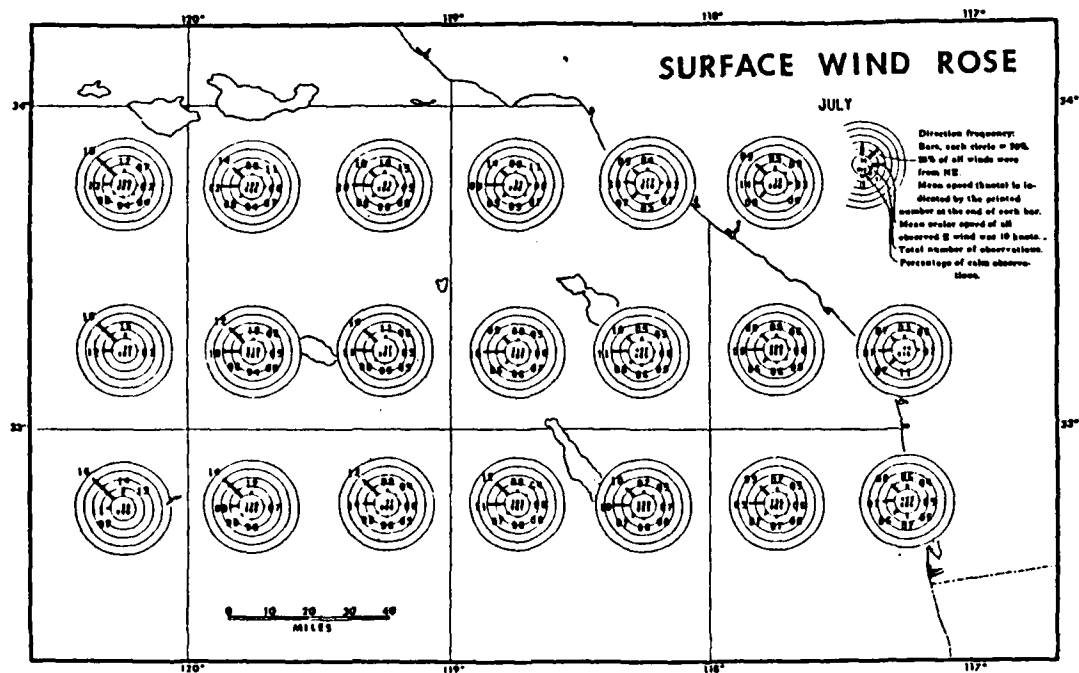


Figure 3.3 Isohyetal Contours, Southern California

Source: Goodridge (1981a)



Source: Climatological Study Southern California Operating Area



Source: Climatological Study Southern California Operating Area

Figure 3.4 Coastal Wind Roses
South Coast and San Diego Regions

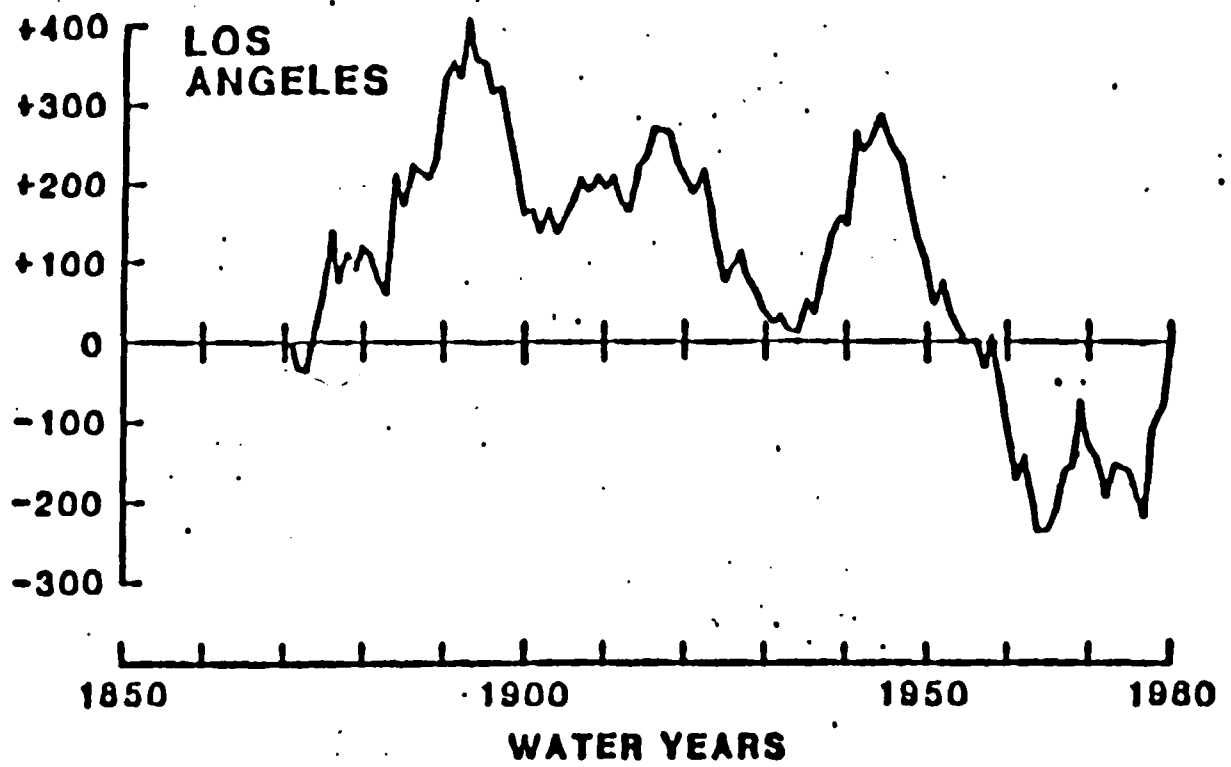


Figure 3.5 Cumulative Departure
from Normal Rainfall, Los Angeles

TABLE 3.1

Drainage Areas in the South Coast Region

Basin or Group	Littoral Cell	Drainage Controlled		Percent Controlled
		Area mi ²	Area mi ²	
Santa Monica Mtn Grp	Santa Monica	417	64	15
Los Angeles River	San Pedro	830	334	40
San Gabriel River	San Pedro	640	537	84
Santa Ana River	San Pedro	1700	1525	90
Laguna Hills Group	S. San Pedro Ranch	200	--	--
		<u>3787</u>	<u>2460</u>	<u>65</u>

Source: Brownlie and Taylor (1981)

Table 3.2

Precipitation at Selected Stations, South Coast Region

Location DRW no.	Elevation ft	Precipitation (inches)			Years of Record	Latitude / Longitude
		average	maximum	minimum		
Santa Monica 7950-00	66	14.4	32.4	6.3	47	34-00-43 118-29-27
Los Angeles 5115-00	269	15.1	32.5	4.92	108	34-03-10 118-14-13
Pasadena 6719-00	862	20.0	46.4	7.3	98	34-08-54 118-08-36
Opids Camp 6465-00	4752	38.9	89.1	13.9	47	34-15-18 118-05-41
Hoegees FC 4017-00	2650	37.2	80.5	13.7	52	34-12-30 118-02-00
Palos Verdes 6663-01	1276	12.8	28.4	3.5	29	34-46-43 118-20-36
Zuma Cyn 9990-11	1500	26.2	57.5	9.1	43	34-05-58 118-49-38
Santa Ana 7888-01	124	13.0	32.1	3.6	70	33-45-05 117-52-11
San Bernardino 7723-00	1125	16.7	42.9	6.0	110	34-07-40 117-16-00
Big Bear Lake 0742-00	6814	34.3	86.9	11.1	34	34-14-29 116-58-29

Source: Calif DWR Bulletin 230-81

Table 3.3

Mean Monthly Precipitation at Selected Stations, South Coast Region, inches

Location	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Santa Monica	3.0	7.8	2.1	1.3	.09	.03	.03	.06	0.8	0.3	2.0	2.3
Los Angeles	3.0	2.8	2.2	1.3	0.1	.03	0.	.04	0.2	0.3	2.0	2.2
Pasadena	4.0	3.8	2.7	1.8	0.3	0.1	.01	.06	0.2	0.4	2.7	2.8
Hoegoes FC	7.4	7.0	5.1	3.7	0.6	0.2	.04	0.1	0.3	0.8	4.9	5.7
Palos Verdes	2.3	2.3	1.7	1.0	0.1	.04	0.	0.	.08	0.2	1.6	1.7
Santa Ana	2.6	2.5	2.0	1.3	0.2	.03	.02	.04	0.1	0.3	1.7	2.2
San Bernardino	3.1	2.9	2.5	1.6	0.5	0.1	.04	0.1	0.3	0.5	1.9	2.6
Big Bear Lake	5.9	5.2	5.6	3.6	0.8	.06	0.7	0.7	0.6	1.0	4.7	5.8

Source: Goodridge (1981a)

TABLE 3.4

Average Wind Speed, MPH, South Coast Region

Location	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ave
Long Beach	5	5	6	7	6	6	6	6	5	5	5	5	6
Los Angeles AP	6	6	7	7	7	7	7	7	6	6	6	6	6

Source: Goodridge (1978)

TABLE 3.5

Average Wind Speed, MPH South Coast Region

Location	N	NNE	NE	ESE	E	ENE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Calm
Long Beach mean speed	3.6 4.5	1.3 4.6	2.5 4.6	3.0 4.9	4.7 4.7	2.3 5.4	4.4 4.9	3.1 6.3	9.2 7.0	4.6 7.7	3.6 6.6	2.1 7.5	9.8 8.3	8.9 7.2	10.1 6.3	3.5 5.4	23
Malibu mean speed	6.8 6.3	4.3 2.4	6.5 2.5	3.3 3.8	5.7 3.5	3.9 3.2	4.0 4.1	3.3 3.0	3.0 3.4	7.3 4.3	18.3 6.9	9.5 6.7	3.2 3.1	1.9 3.2	4.8 5.8	13.9 5.7	1

Source: Goodridge (1978)

TABLE 3.6

Percent High Wind, Peak Gust South Coast Region

Location	%>17k	%>27k	Peak Gust mph	Month of Max %>17k
Long Beach	0.9	0.01	44 (fastest mile)	Feb (1.8%)
Los Angeles	1.3	0.05	62 (fastest)	Feb (3.0%)

Source: Goodridge (1979)

TABLE 3.7
Major Storms in the South Coast Region

Date	Watersheds Affected	Remarks
Dec 1861 - Feb 1862	All	Heavy continuous rain, severe floods.
Feb 1884	All	Continuous rain, severe floods.
Jan 14-19, 24-29, 1916	All	Two severe storms, floods.
Dec 30-31, 1933	Los Angeles R	Fire-flood sequence, heavy downpour.
Sep 1939	All	Tropical storm.
Dec 27, 1940- Jan 7, 1941	All	Series of moderate to intensive storms.
Jan 15-18, 1952	All	3 days intense storm.
Jan 25-26, 1956	Southwestern	
Jan-Feb 1969	All	3 intense storms, well documented.
Dec 4, 1974	Santa Ana R	High 3 hr intensity.
Jan-Mar 1978	All	Series of storms, well documented.
Feb-Mar 1983	All	Series of storms.

TABLE 3.8

Selected Precipitation Gages, South Coast Region

Station	Agency	Period of Record	Type	DWR #	Other #	Remarks
Santa Monica SPRR	LAC	1879-1922	S	7950-70	F-635	
Artesia	LAC	1918-	S	0331-11	F208B	
Los Angeles CC	LAC	1872-	S, R	5111-04	F-716	Also F-577A, B, C, D, E at nearby locations.
Van Nuys	LAC	1905-	S	--	F-15A	
Colby's	LAC	1898-	S, R	1896-00	F-530	
Big Tujunga Dam	NWS/LAC	1917-	S, R	0798-00	F-46D, E	
Clear C School	LAC	1929-	S, R	1798-11	F-470	
Mount Wilson	DWR/LAC	1905-	S	6000-00	F-338A	
Glendora West	LAC	1883-	S	3452-00	F-18	
Falling Springs	LAC	1929-1974	S	2961-11	F-51	
Idylwild FD	RIV/NWS	1901-	SA	4211-00	5S/3E 07P01	
Beaumont	RIV/NWS	1888-	R	0606-00	35/1W-10P01	
San Bernardino Med Center	SBDO/NWS	1871-	S	7723-00	(SBDO) 146	
Riverside F.S.	RIV/NWS	1881-	S, R	7470-00	2S/5W-34P01	
Anaheim W.W.	OC	1880-	S, R	0194-00	33	

Source: Calif DWR Bulletin 230-81

Los Angeles County (LAC) Dept of Public Works
 Orange County Environmental Management Agency (OC)
 Riverside County (RV) Flood Control and Water Conservation District
 San Bernardino (SBDO) Flood Control and Water Conservation District

TABLE 3.9

Selected Wind Gages, South Coast Region

Station	Agency/Type	Period of	#	Lat/Long	Remarks
Santa Monica	LAWR	1961-	----	34° 01' 118° 27'	4x per day.
Los Angeles	WBAS	1930-	23174	33° 56' 118° 23'	LAX, digitized 1947- hourly 1937-.
San Pedro NAS	NAS	1938-1947	93113	33° 45' 118° 15'	Hourly.
Malibu	SCAQMD	1957-1975	002W-ZUM	34° 1'9" 118° 49' 37"	Hourly, mag tape.
Los Angeles LAX	SCAQMD	1956-	013W-LAX	33° 56'24" 118° 23'45"	Digitized.
Venice	SCAQMD	1956-	014W-VEN	33° 59' 4" 118° 23'13"	Digitized to 1975.
Newport	SCQCMD	1956-	063W-NP	33° 36' 3" 117° 54'58"	Digitized to 1975.
Long Beach	WBAS	1957-	93106	33° 4' 118° 09'	Digitized.

Sources: National Climatic Data Center
 South Coast Air Quality Management District (SQAQMD)
 Art Lessard, National Weather Service

WBAS= Weather Bureau Airport Station

NAS = Naval Air Station

LAWR = Limited Weather Aviation Reporting Station

4.0 SOUTH CENTRAL REGION

The South Central Region includes portions of San Luis Obispo, Santa Barbara, Ventura and Los Angeles Counties. The extent of the South Central Region is defined by watersheds draining to the Morro Bay Cell, which extends from ragged Point to Point Buchon; the South Morro Bay Reach, which extends from Point Buchon to Point San Luis; the Santa Maria River Cell, which extends from Point San Luis to Point Sal; the South Santa Maria Reach, the Santa Ynez River Cell, which extends from about four miles south of Point Sal to Point Arguello; the Santa Barbara Cell, which extends from Point Arguello to the Mugu Submarine Canyon off of Calleguas Creek; and the South Santa Barbara Reach, which extends from the Mugu Canyon to Solromar. The littoral cells correspond to those defined in the Assessment and Atlas of Shoreline Erosion Along the California Coast (July 1977) and are shown in Figures 4.1, 4.2 and 4.3, taken from this document. The following sections give general meteorological information regarding the watersheds draining into these regions.

A. Drainage Areas

A.1 Drainage Areas and Sub-Areas

The South Central Region has four major river basins, three creek basins and two drainage groups. The river basins are those of the Santa Clara, Ventura, Santa Ynez and Santa Maria Rivers; and the creek basins are those of the Calleguas, San Antonio (Santa Barbara County) and Arroyo Grande Creeks. In addition, there are the Santa Ynez Mountains and the Morro Bay stream groups. These regions are shown on Plate 4.1 and some characteristics are listed in Table 4.1. For a more detailed description, one is referred to the companion report on hydrology.

A.2 Physiography and Topography

The watersheds draining to the South Central Coast Region are separated into two distinct regions. In the north, the coast runs northwest, and the drainage area is bounded by the Santa Lucia Mountains and the Caliente Range. South of Point Conception, the coast runs generally east-west and the watersheds are bounded on the north by the San Andreas Rift Zone, and on the east by the San Gabriel and Santa Susana Mountains. Other important ranges in the region include the Santa Ynez Mountains, the San Rafael Mountains and the Sierra Madre Mountains. For a more complete discussion, one is referred to the companion report on hydrology.

A.3 Climate of the South Central Region

A.3.1 General Features

While the climate of the South Central Region is generally classified as having a Mediterranean Dry-Summer Subtropical climate, the climate in fact varies considerably due to topographic effects. North of Point Conception, the coast and coastal mountain ranges run in a northwesterly direction; south of Point Conception, they run in a generally east-west direction. Because of the typical storm approach and the prevailing northwest winds, the two regions exhibit somewhat different climatic features.

Along the coast, temperatures are controlled by the cool ocean temperatures, and the temperature range is small. Average coastal winter temperatures are about 53°F, and average summer temperatures run from 69°F in the south to 63°F in the north. Inland, however, there are much greater variations. In the upper Santa Maria River Watershed, it is usually hot and dry in the summer and much colder in winter. Daily temperature ranges differ by region as well. On the coast, the range is about 14°F in July and varies from 15°F in the north to 22°F in the south in winter. Inland, the temperature range is as high as 42°F in

summer and 30°F to 35°F in winter. The extremes are greatest in the "Cuyama Badlands" of the Cuyama River watershed.

An important part of the climate of this region is the marine layer, which allows the development of low stratus clouds and fog along the coast, especially at night and in the morning. The low cloud development is especially prevalent in coastal areas and in coastal valleys near the Santa Maria, Santa Ynez and Santa Clara Rivers. The marine layer is responsible for the cool, moderate temperatures along the coast, and is caused by the cold surface waters off the coast in the region. Typically in the northern coastal areas, five days per month have fog in winter, whereas twenty days per month are foggy in the dry season. In the southern coastal area, fog is less prevalent, but on the average twenty days per month exhibit low overcast conditions in the dry season.

A.3.2 Typical Storm Patterns

The main synoptic feature controlling the weather in the South Central Region is the North Pacific High, the location and intensity of which affects storm tracks associated with low pressure cells. In winter, the Pacific High is often weak and moves south, allowing storms to move in from the west or northwest.

Most rain is associated with winter cold fronts, of which there are two main types: the high-latitude type, in which a blocking high-pressure cell builds east of 160°W and the storms approach from high latitudes, and the low-latitude type, in which blocking takes place between 160°W and 180°W, and storms, often developing in the Hawaiian region, approach from lower latitudes.

Thunderstorms are rare in the coastal areas, but occur occasionally in summer and fall in the inland mountain areas. Thunderstorms in the area are generally of low intensity, with relatively light rainfall, so that forest fires started by the associated lightning strikes are not uncommon.

Tropical storms in the region are extremely rare, but occasionally a dissipating storm approaching from the south will cause local perturbations in the weather. In general, one will find increased thunderstorm activity as humid air associated with the storm moves into this region, but the thunderstorms are usually confined to lower latitudes.

A.3.3 Precipitation Patterns

Precipitation patterns are more complex in the South Central Region than in the San Diego and South Coast Regions. There are strong orographic effects near the coast and along the coastal ranges, and there tends to be a general trend towards increasing rainfall to the north, but topographic effects result in some interesting deviations from the usual trends.

Figure 4.4 shows isohyetal contours of mean annual precipitation in the region. In general, these reveal strong orographic effects, especially in the

coastal areas. There is, however, one region at relatively high altitude with much less rainfall than the surrounding areas--the "Cuyama Badlands." This area lies behind the barrier of the Sierra Madre Range ("behind," in the sense that it is in the lee, with respect to prevailing winds and typical storm tracks); as a result, approaching storms lose much of their moisture in passing the coastal ranges, and have a lower precipitation potential in this region.

The generally increasing precipitation in the northerly direction is broken by the Santa Ynez Mountains and the change in coastline direction at Point Conception. The coastal precipitation averages increase from 14 inches in the Oxnard area to more than 20 inches west of Santa Barbara, which lies at the foot of the Santa Ynez Mountains, drop to below 14 inches at Santa Maria, then rise again to 16 inches in the Morro Bay Area. Typical precipitation values at selected stations are shown in Table 4.2. Note that Ozena, in the "Cuyama Badlands" has an annual average of only 13 inches despite being located at an elevation of over 3700 feet. One can see another feature of the rainfall in this area in Table 4.2--the wide variation in the extremes. Generally, the maximum annual value is more than twice the mean, and the minimum is usually about 30% of the mean. This is due to the intermittency of rainfall in the region. It is not unusual for one storm to bring more rainfall than might be measured in an entire season another year.

A.3.4. Seasonal Precipitation

As was mentioned previously, most precipitation in the South Central Region is associated with winter cold fronts. Typically, 90% of all precipitation occurs during the months of November through April. Table 4.3 shows mean monthly precipitation at selected stations in the region. Note the almost total absence of rainfall in the summer months. Unlike areas further south, which are occasionally subject to influxes of moist tropical air in the late summer, sometimes producing thunderstorms, this area shows only a very slight increase in precipitation at higher elevations in early fall (Juncal Dam, and Ojai), indicating that thunderstorm activity in the region is less intense than in areas to the south.

It is to be noted that in most areas of the South Central Region, snowfall is extremely rare, and that almost all precipitation is due to rainfall. Exceptions are in the higher elevations of the San Rafael Mountains and in the Mount Piños area, where snowfall is common in the winter, and often lasts several weeks, especially on northern slopes.

A.3.5 Precipitation Frequency

Precipitation frequency for given intensities and durations is important in this region because of the intermittent nature of precipitation, and the large year-to-year variation. There are two excellent sources of data on this subject. One is the NOAA Precipitation-Frequency Atlas of the Western United States, Volume XI-California. This atlas provides isopluvial contours for

6-hour and 24-hour precipitation with 2-year to 50- year return periods.

The second source is the California Department of Water Resources publication "Rainfall Depth-Duration-Frequency for California", Goodridge (1981). This publication contains measured intensities and depth-duration-frequency tables for many stations in California.

In general, the intensities are dependent upon elevation, with the lowest near the coast and highest in the mountain areas. For detailed information, the reader is referred to the above sources.

A.3.6 Coastal Wind Regimes

The basic airflow in the South Central Region is northwesterly, which is due to the eastern North Pacific High. This high is dominant in summer, but moves south and weakens in winter. Winter winds are still primarily from the northwest, but are modified by passing fronts and other meteorological disturbances. East and southeast winds are common as storms approach, and often veer to the southwest or west with the passage of the storm's cold front.

While the general flow trend is from the northwest, local topography results in local variations. The most prominent feature is the change in coastline direction at Point Conception and the Channel Islands which result in a more westerly flow in the Ventura area, and almost southwesterly in the Santa Barbara area (Figure 4.5). The Channel Islands form something of a barrier to surface winds, and tend to "funnel" the prevailing winds along the southern part of the region.

There is a similar effect at Point Estero above Morro Bay, but the change in coastal direction is not as radical or pronounced as at Point Conception, so the effect is reduced. In addition, coastal topography north and south of Point Estero is characterized by coastal hills and mountains which rise out of the sea and tend to prevent direct onshore flow.

The basic pattern of the prevailing winds is often modified by several synoptic conditions. These are discussed in the section which follows.

A.3.7 Land-Sea Breeze

An important factor in the wind pattern of the South Central Region is diurnal variation. The strong land heating results in a strong landward pressure gradient, especially during the late spring and summer, and particularly in the basins of the Santa Maria, Santa Ynez and Santa Clara Rivers, which are relatively flat in the coastal areas. At night, the land surface radiates heat, and a seaward pressure gradient develops. These local gradients are superposed on the larger synoptic scale gradients, and result in diurnal variations in wind patterns. The land-breeze is strongest in winter (Figure 4.6, from DeMarrais et al. 1966).

A.3.8 North Pacific Storm Winds

The basic wind pattern is altered by the passage of storms and other weather disturbances, most of which arrive in the winter months. Weather fronts are normally the most prominent feature associated with these storms, and are either occlusions or cold fronts, with the occlusions tending to acquire the characteristics of cold fronts as they move southeastward over Southern California. Although there is no simple typical flow pattern associated with fronts, there are often strong, and sometimes damaging easterly or southeasterly winds as the front approaches. As the storm moves inland, these winds tend to veer to a southerly, southwesterly or westerly direction, and high winds may once again occur. Wind speeds on the order of 20 to 25 mph are not unusual during the passage of storm fronts, and occasionally the sustained speeds are much higher. Storms associated with warm fronts are much rarer and are usually associated with low-latitude type storms. According to DeMarrais et al. (1966), these storms usually lose their identity as warm fronts as they approach the coast.

A.3.9 Santa Ana Winds

A very important climatic feature of the area are the Santa Ana winds which can develop at any time of the year. These warm, dry, foehn-type winds originate from a high-pressure center which develops over the Great Basin, often a day or so after the passage of a cold front. The winds are particularly dangerous in late summer and fall, at the end of the dry season, when they can produce extreme fire danger in the chaparral areas of the inland and costal mountains.

Local topography is an important factor in the wind pattern. Figure 4.6 shows a typical Santa Ana wind condition in the region. Note the flow reversal in the Santa Barbara area, and the intense flow down the Santa Clara River Basin. North of Point Conception, the coastal and inland ranges often block or alter the wind pattern, but warm, dry conditions are often prevalent during Santa Ana wind conditions, even when winds are not intense in this region. In the case shown in Figure 4.7, winds are light in the Santa Barbara area, but this is not always the case. Intense north and northeast winds can sweep down the mountain passes in this area as well. Winds are typically 20 to 30 mph in canyons, but can approach 100 mph during intense storms.

Another warm, dry wind, which often occurs during the late afternoon or early evening of a warm day is the "Sundowner" (as it is locally known). This northwest to north wind is of the foehn type, exhibiting many of the characteristics of the Santa Ana, including hot, dry air and very high fire danger. Sundowners originate as a high pressure nudges onto the coast of San Luis Obispo (but not all the way into the Great Basin, as occurs in Santa Ana conditions), and the winds blow southward through inland valleys and over the coastal ranges. Sundowners, which are normally much more brief than Santa Anas, are most prominent in the Santa Barbara area in the late spring and summer. A legendary Sundowner occurred in Santa Barbara on June 17, 1859, when temperatures (according to unsubstantiated reports) briefly shot up to over 130°F.

A.3.10 Winds and Severe Weather

Coastal severe weather is rare in this area, but intense winds can occur. Tornadoes and waterspouts are a rare occurrence (a tornado was reported in the San Luis Obispo area in 1926). Thunderstorms are not uncommon inland in late summer and fall, but are rare on the coast and are usually not very intense. Dissipating tropical storms are extremely rare in this region.

A.3.11 Topographic Effects on Coastal Winds

As noted previously, the change in coastline direction at Point Conception has a profound effect on the wind patterns in the South Central Region. There are other effects as well. The basins of the three major rivers in the region are neatly aligned with the prevailing winds, so that the winds are able to blow up the river valleys. The result is rather strong, persistent winds from the sea at the mouths of the Santa Maria, Santa Ynez and Santa Clara Rivers, and the San Antonio Creek (Santa Barbara County). These winds are very important in the transport of beach sand. There are large dunes in the northern coastal areas, especially near the Santa Maria River (Pismo Beach) and San Antonio Creek. In the Oxnard area, wind transport of sand is often a problem in residential areas built too near the coast (Inman, 1980).

A.3.12 Wind Intensity and Frequency

Tables 4.4, 4.5 and 4.6 summarize the wind intensities and frequencies for these regions. These data are taken from Goodridge et al. (1979) and Goodridge (1978).

As can be seen from Table 4.4, the seasonal variation is not great for the mean wind speed for the stations shown. However, the mean speed at Port San Luis is 12 mph in late spring and summer and 5 mph in late fall and winter. High wind speeds are seasonally dependent, (Table 4.6), except in the Santa Barbara area which is partly sheltered from the prevailing northwest winds by the Santa Ynez Mountains.

The effects of topography previously mentioned can be seen in Table 4.5, especially in the wind direction frequencies. The high average wind speeds north of Point Arguello should also be noted, as these are very important in the transport of sand on the beaches.

B. Historical Perspective

B.1 Historical Outline of Wet and Dry Periods, South Central Region

The most comprehensive treatment of the historic rainfall record prior to recorded measurements was done by Lynch (1931). Included in his work is a rainfall index for the Santa Barbara area from 1850 to 1930. His work indicates that the period from 1850 to 1882 was generally dry, despite the floods of 1862, as was the period 1894 to 1904. The period 1882 to 1894 was generally wet.

Figure 4.7 shows the cumulative deviation from mean precipitation at Ventura, which indicates a very wet period from 1906 to 1918, and very dry periods from 1918 to 1935 and from 1944 to around 1966.

The extreme variability is an important feature, as very wet years often arrive in the middle of a dry period. Conversely, wet periods tend to contain several dry or very dry seasons.

B.2 Historical Outline of Major Storms in the South Central Region

There is no definitive history of storms in this region, and early accounts are qualitative in nature. The following is a brief outline of some important storms in the South Central Region.

B.2.1 Rain Storms

The floods of 1825 and 1862 were severe, but there are few storm descriptions. The 1862 flood is generally described as being the result of 30 to 60 days of continuous rainfall. Table 4.7 lists some of the major storms in this region.

Many of the storms cross regional boundaries, and cause flooding in large areas. Some were particularly severe in relatively localized regions, such as the 1907 storm which caused a record flood on the Santa Ynez River, the January 1914 storm in Santa Barbara, or the 1967 storm which caused severe flooding in the Santa Barbara and Ventura areas, especially in the coastal areas.

B.2.2 Wind Storms

Wind storms are much less documented, largely because they seldom cause much economic damage. Wind storms are often associated with large rain storms, such as the 1983 storms. Some important wind storms in the region include the May 2-3, 1926 gale, which affected much of the coast south of Point Conception. Kuhn and Shepard (1981) report that a severe Santa Ana wind on June 17, 1859 drove air

temperatures over 130°F near Santa Barbara. Severe Santa Ana winds have also been associated with major forest fires, such as the September 1955 Refugio fire in Santa Barbara, and the October 1967 fires in the Santa Clara River basin.

C. Data Search and Retrieval Efforts

C.1 Technical Approach

Data were collected from a number of governmental and public organizations. Previous reports and documents on similar topics were located and examined as part of the literature search. These documents often contained or referred to data, whose original sources were noted. Government and public agencies were then contacted, and in many cases visited.

The following is a general description of data sources relevant to the South Coast Region.

San Luis Obispo County Air Pollution Control District

Relevant data include:

Wind data at two coastal stations. Hard copy and computer files.

People contacted include:

Paul Allen (Meteorologist) (805) 549-5912

San Luis Obispo County Flood Control and Water Conservation District

Relevant data include:

Precipitation data, with hourly data (hardcopy) and summaries (daily, intensities) etc. on hard-copy and computer. Charts of recording gages also maintained.

Streamflow: daily averages on hardcopy and computer (recent only).

Hydrographs at selected stations maintained.

No debris, sediment or fire records are maintained.

People contacted include:

Ann Hall (precipitation, streamflow)
(805) 549-5273

Glenn Britten (precipitation, streamflow)
(805) 549-5268

Santa Barbara County Air Pollution Control District

Relevant data include:

Wind data at five coastal stations.

Most data are unreduced, unverified.

People contacted include:

Don Jones (meteorologist) (805) 964-8658

Santa Barbara County Flood Control and Water Conservation District

Relevant data include:

Precipitation data, in hard copy form; charts available from recording gages.

Limited data on debris basin cleanouts, sedimentation in the Goleta Slough. Streamflow data are limited; U.S.G.S. now maintains all stations in the County.

People contacted include:

John Fertig (debris, sedimentation) (805) 963-7125

Wayne Smith (precipitation)

Phil Holland (precipitation)

James Stubchaer (manager)

Ventura County Air Pollution Control District

Relevant data include:

Wind data from two coastal stations.

People contacted include:

Evan Shipp (meteorologist) (805) 654-2668

Ventura County Flood Control and Water Resources Department

Data include:

Precipitation--hard copy and on computer data base.

Streamflow--hydrographs and daily measurements, hard copy and on computer data base.

Debris basin cleanout data.

Beach profiles made monthly.

People contacted include:

Dolores Taylor (streamflow, precipitation)
(805) 654-2014

Fran Solis (beach profiles) (805) 654-2906

Bill Doré (computer data) (805) 654-2908

Southern California Edison Company

This organization maintains wind monitoring equipment at the San Onofre Nuclear Generating Station (S.O.N.G.S.), as well as at the Oxnard, Ventura, El Segundo, Los Alamitos and Huntington Beach coastal power plants. Except at S.O.N.G.S., data are of questionable value.

People contacted include:

Stan Marsh (Meteorologist) (818) 302-1189

Los Angeles County Department of Public Works (Formerly Flood Control District)

The data available at this agency include:

Precipitation data, with both hourly data and the original charts or punch tape from recording gages;

Streamflow data, with both daily and charts or punch tape from recording gages;

Debris data, including hand-entered tables of the quantities of debris stored and removed from debris basins;

Streamflow and precipitation data are on microfilm up to 1977. The most recent publication covers the 1975-77 period.

People contacted include:

John Mitchell, Head, Operations Section (213) 226-4190

Don Carpenter (rainfall), Hadi Nourzi (fires, debris)
(213) 226-4184

Tom Alexander (fires, debris), Ed Dingman (streamflow),

Bob Sarasua (streamflow records) (213) 226-4184

Chris Bredehorst (frequency analysis) (213) 226-4089

California Department of Water Resources

Data from this agency include:

Streamflow, with data available in the Water Data Information System (WDIS). Data are available on microfiche (least expensive) and electronic form.

Precipitation, also available on WDIS.

Wind data are available in limited form, as it is gathered only in conjunction with particular contracts.

People contacted include:

Bill Mork, State Climatologist (916) 445-5800

California Air Resources Board

Data available from this agency include limited wind data, although the agency now maintains few stations relevant to this study. Occasional measurements are made in conjunction with particular projects. Some data are received from Air Pollution Control Districts, but are more readily available from these agencies.

People contacted include:

Dale Secord, John Kinney and Art Lorenzen (Sacramento)
(916) 322-6206

National Weather Service, Los Angeles

Data available from this agency include coastal wind speed and direction with hourly and three-hourly averages. The hourly data are reported to the

National Climatic Center. The three-hourly data are kept for several years, then discarded (these data are from harbor masters and lifeguards). Data are in tabular form.

People contacted include:

Art Lessard (Chief Meteorologist) (213) 209-7215

Other individuals contacted include:

Robert de Violini, Climatologist, Pacific Missile Range, U.S. Navy, Pt. Mugu; (805) 989-8383

Don Tuttle, Humboldt County Public Works, Natural Resources Division (Coastal Storm History); (707) 445-7741

Gerald Kuhn, Scripps Institution of Oceanography, (Coastal History); (619) 452-4856

Prof. Gary Griggs, University of California, Santa Cruz (Coastal Storm History); (408) 429-2403

There are several reference libraries in the South Coast Region which are extremely helpful. These include:

University of California, Los Angeles Water Resources Archives, Beth Willard, Librarian (213) 825-7734

This reference library has an extensive collection of publications, manuscripts and material relevant to this study. There is a large collection of uncataloged documents from local agencies as well. In addition, material not available at the UCLA Water Resources Archives can usually be obtained from the University of California, Berkeley through UCLA. Sources are well cataloged and easy to find.

California Department of Water Resources, Southern Division, Los Angeles

The records and documents section combine an extensive collection of California State publications. In addition, there is a large collection of relevant documents and publications from local and federal agencies, including the County Flood Control Agencies. Sources are well cataloged and easy to find.

California Institute of Technology Libraries

Extensive collection of relevant journals and some federal and state publications. The best sources are the Environmental Engineering Library, Keck Laboratory, and the Engineering Library (Millikin Libraries). Unfortunately, the collections are spread out over several buildings and a certain amount of searching is often required.

University of California, Los Angeles Engineering Library and Geology Library

These two libraries have extensive collections of relevant journals. The Engineering Library has vast holdings of Weather Bureau/Weather Service publications. The geology library has all relevant U.S. Geological Survey Water-Supply Papers and Water Resources Data (as does the Water Resources Archives, where they cannot be checked out) and other U.S.G.S. publications. Both are excellent sources for reference material.

National Weather Service, Wilshire Federal Building

The reference room (normally closed to the public) has an extensive, uncataloged collection of relevant publications, including out-of-print publications and unpublished documents. Wind data are also available.

U.S. Army, Corps of Engineers, Los Angeles District Library

This library has most Corps of Engineers publications, including Beach Erosion Board and CERC publications. Some publications from local and state agencies are also available, as are some U.S.G.S. Water-Supply Papers. References are often miscataloged and difficult to find.

C.2 Meteorological Data Available

Tables 4.8 and 4.9 list some significant rainfall and wind gages in this region. More detailed and complete lists appear in Appendix C. Tables 4.8 and 4.9 are provided as a quick reference.

C.2.1 Precipitation

There are over 350 present and discontinued rain gages in the South Central Region. Of these, most are maintained cooperatively with county flood control agencies, and data are available at these agencies. Table 4.8 lists some of the stations with very early records.

Because of the importance of these data, the data are often available through several sources. The following is a description of the better data sources.

C.2.1.a San Luis Obispo County Flood Control and Water Conservation District

A list of the more than 95 gages maintained by this agency is included in Appendix C. The agency maintains records of daily precipitation for all stations. Post-1980 data are on computer files; the rest are in tabular form.

Charts from recording gages are maintained. Monthly totals are also available on computer files. Intensity data are taken from recording gages and maintained. Note that there are only nine recording gages maintained by this agency.

C.2.1.b Santa Barbara County Flood Control and Water Conservation District

Records of more than 120 recording and 120 non-recording gages are maintained by this agency. A list of these gages, updated by Phil Holland for this study, is included in Appendix C. Daily records are maintained in tabular form for all gages. Charts or digitized tapes of recording gages are also available. To obtain the data, normally a specification of the gage or gages and period of record are needed. No data are maintained on computer files.

C.2.1.c Ventura County Flood Control and Water Resources Department

This agency maintains records of 98 rain gages, including 41 recording gages. Fifteen gages are storage type, located in steep, rugged terrain and are read once or twice a year. Recent data are on computer files, and tabular records are maintained on all gages. In addition, recent hourly rainfall and intensity data are now on computer data files. Normally, the data can be obtained by specifying the gage or gages and a period of record.

C.2.1.d Los Angeles County Department of Public Works

Formerly the County Flood Control District, this agency maintains about 35 rain gages in the upper Santa Clara watershed. Daily measurements from this agency are available in tabular form. In addition, data up to 1978 are kept on microfilm, including rainfall charts. Intensity data are available in tabular form, and are updated annually. Data are available by specifying the station and the period of record. A list of gages and some examples of the data available are included in Appendix C.

C.2.1.e California Department of Water Resources

This agency maintains few stations, but now keeps records of over 4000 stations in California. Goodridge (1981a) has compiled microfiche files for these stations, and these data are being submitted under a separate cover. In addition, updates for 1981 through 1983 provided by William Mork are also being submitted under a separate cover.

These data include monthly precipitation for the period of record, among with useful calculated values (average, departure from the average, cumulative

departure, etc.). A second record includes monthly frequency data, with return periods from 0.01 to 10,000 years.

In addition, Goodridge (1980, 1981b) has published in microfiche form measured maximum daily rainfall for over 1100 gages and depth-duration-frequency data from 689 recording and 853 non-recording gages. The former publication includes maximum daily rainfall by month. The latter includes measured intensities from 5 minutes to 60 days by month and year, and includes a frequency analysis.

The above microfiche files are extremely useful for examining rapidly the data characteristics of a particular gage. The latter two publications concentrate on older stations, and are helpful in finding long term records.

The California Department of Water Resources has also published a list of precipitation gages (Bulletin 230-81). Relevant portions of this document are reproduced in the Appendix. Note that these lists often contain errors; it is best to use the list to locate stations in an area of interest, then to find the stations through the agency lists provided in the Appendix.

C.2.1.f National Weather Service

Hourly precipitation for National Weather Service recording gages is now available on microfiche and magnetic tape for data from 1940 to the present. In addition, fifteen-minute recordings from 1971 to the present are available on magnetic tape. The hourly data, as well as daily, monthly and annual data, are available from the National Climatic Data Center. The complete list of data available is lengthy, and will not be repeated here. For reference, see the Selective Guide to Climatic Data Sources, Hatch (1983).

C.2.2 Wind Measurements Along the Coast

In contrast to the precipitation gages, the coastal wind stations are few in number and have relatively short records. A list of the important gages is shown in Table 4.9. The following is a discussion of data available.

C.2.2.a National Climatic Data Center

The publication Index of Original Surface Weather Records for Stations in California, National Climatic Data Center, gives details of the data available for the first nine stations in Table 4.9. The most complete stations (Santa Maria, Vandenberg, Santa Barbara and Point Mugu) have hourly averages of wind speed and direction dating as far back as 1929. Note that Santa Maria is included mainly for the record length in this region, but that the station may be too far inland to give more than an estimate of coastal winds.

Data for these stations is available through the National Climatic Data Center. Data are available on microforms and magnetic tape.

C.2.2.b Air Pollution Control Districts

The San Luis Obispo, Santa Barbara and Ventura County Air Pollution Control Districts maintain coastal wind stations listed in Table 4.9. These are all relatively recent stations; however, in all cases both hourly and strip chart data are available. For the Santa Barbara County stations, most data are kept unreduced and unverified. These data are available through respective agencies.

C.2.2.c Other Sources of Wind Data

There are several other sources of coastal wind data, although these data generally are not necessarily verified and in many cases exist only in "raw" form (i.e., charts). Southern California Edison Company (Stan Marsh) has coastal wind data (charts) available at Oxnard and Ventura. Pacific Gas and Electric Company (Bob Swanson) maintains a wind data station at Diablo Canyon (1973-present). In both cases, these are relatively recent data and are not verified, so the value may be limited. The California Air Resources Board has done short term studies, including one near Carpinteria, where wind measurements were made near the coast. These studies are generally for periods of less than one year, and may also be of limited value.

C.2.3 Other Relevant Data Sources

Summaries of wind data are available in the Department of Water Resources Bulletin 185, Goodridge (1978) and in Goodridge et al. (1979). In addition, climatic summaries available through the National Climatic Data Center (ref. Selective Guide to Climatic Data Sources). Additional data summaries are available in Climatological Study, Southern California Operating Area, Naval Weather Service Command (1971) available on microfiche (NTIS # AD-721-117). In addition, data records and summaries are available for Point Mugu (Robert de Violini).

C.2.4 Related Topics

Precipitation hyetographs are generally not available, except those done for specific studies. However, charts from recording gages, or the digital tapes, are almost always preserved. The digital tapes have the advantage of allowing computer processing; however, they in general record only to the nearest 0.1 inch.

Historical data for wind are extremely limited in this region, with only a few stations with more than 50 years of data. Of more concern is the fact that where the data are most needed (the coastal dune area near Pismo Beach), there are no records kept.

D. Data Gaps and Limitations

There are few precipitation stations, and fewer still with long records, in the Morro Bay Group. Although this area represents a small fraction of the region, the lack of data in this area may be limiting. Most other areas in the South Central Region are adequately covered.

Again, data summaries are available through the California Department of Water Resources for commonly needed precipitation statistics. These summaries can be extremely useful in aiding the initial phases of a study.

Wind data along the coast are limited, and this is a serious shortcoming, since transport of sand by wind is very important in this region, especially in the Oxnard and Pismo Beach areas. The Oxnard area (Pt. Mugu) has good records available, as does the Vandenberg area, but the Pismo Beach area is not well covered (except for very recent measurements at Grover City). Records at Santa Maria may help here, but the station is well inland.

As is true in other regions, there is no definitive storm history of this area. Although there are accounts of very recent major rainstorms, there is little in the way of wind storm history. An effort should be made to develop some sort of wind storm history, as well as rain storm history. In part, this could be done using digitized wind data (when available) and algorithms designed to look for extended periods of high wind. Other historical sources, such as newspapers, should be examined to develop a history as far back as is possible. Available meteorological data (such as weather maps) for the storms identified could then be examined to develop a meteorological history of storms. A study of this sort would be a significant contribution, and would aid in the development of statistics regarding severe weather patterns.

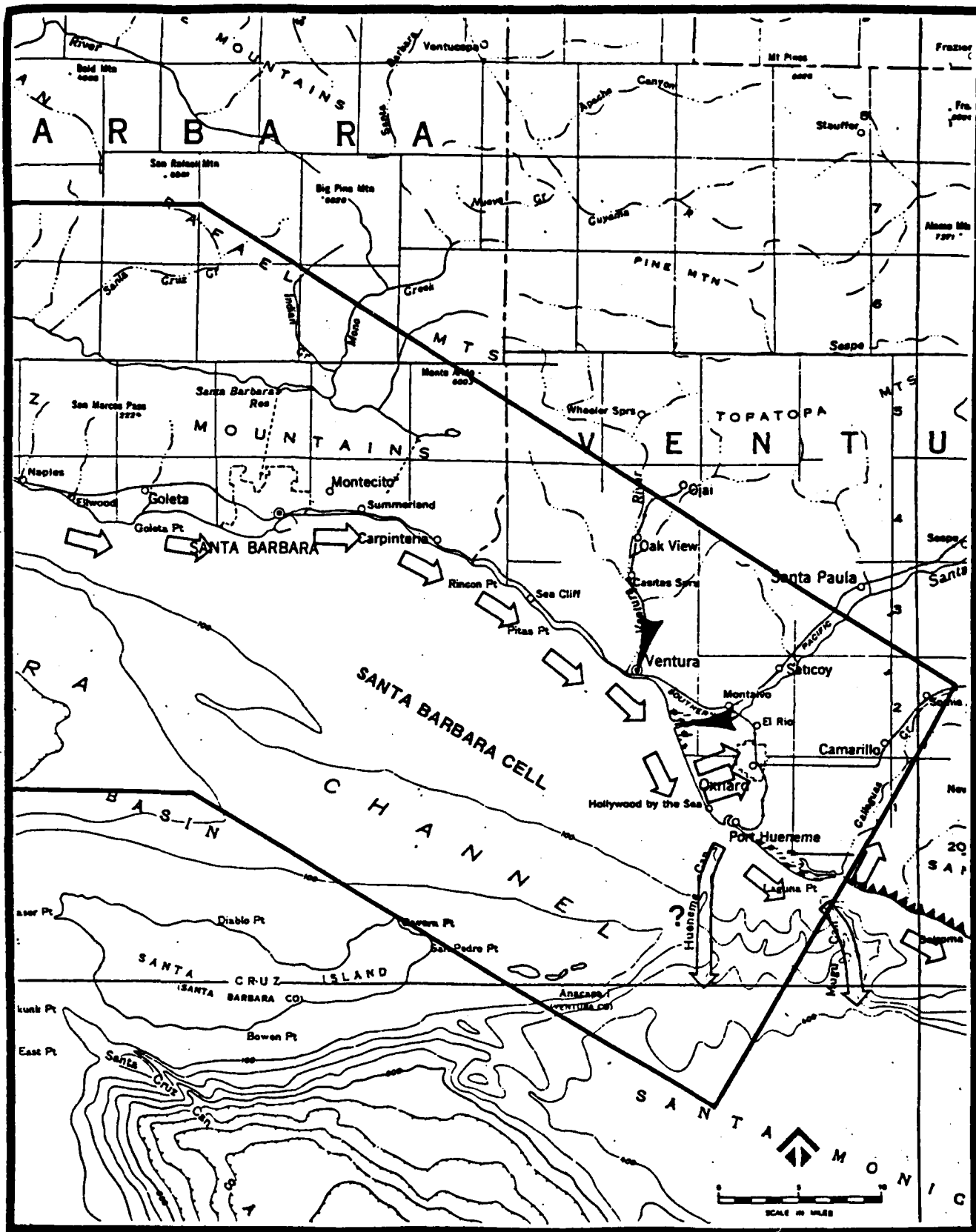


Figure 4.1 South Central Region

Source: Calif. DNOD Atlas of Shoreline Erosion

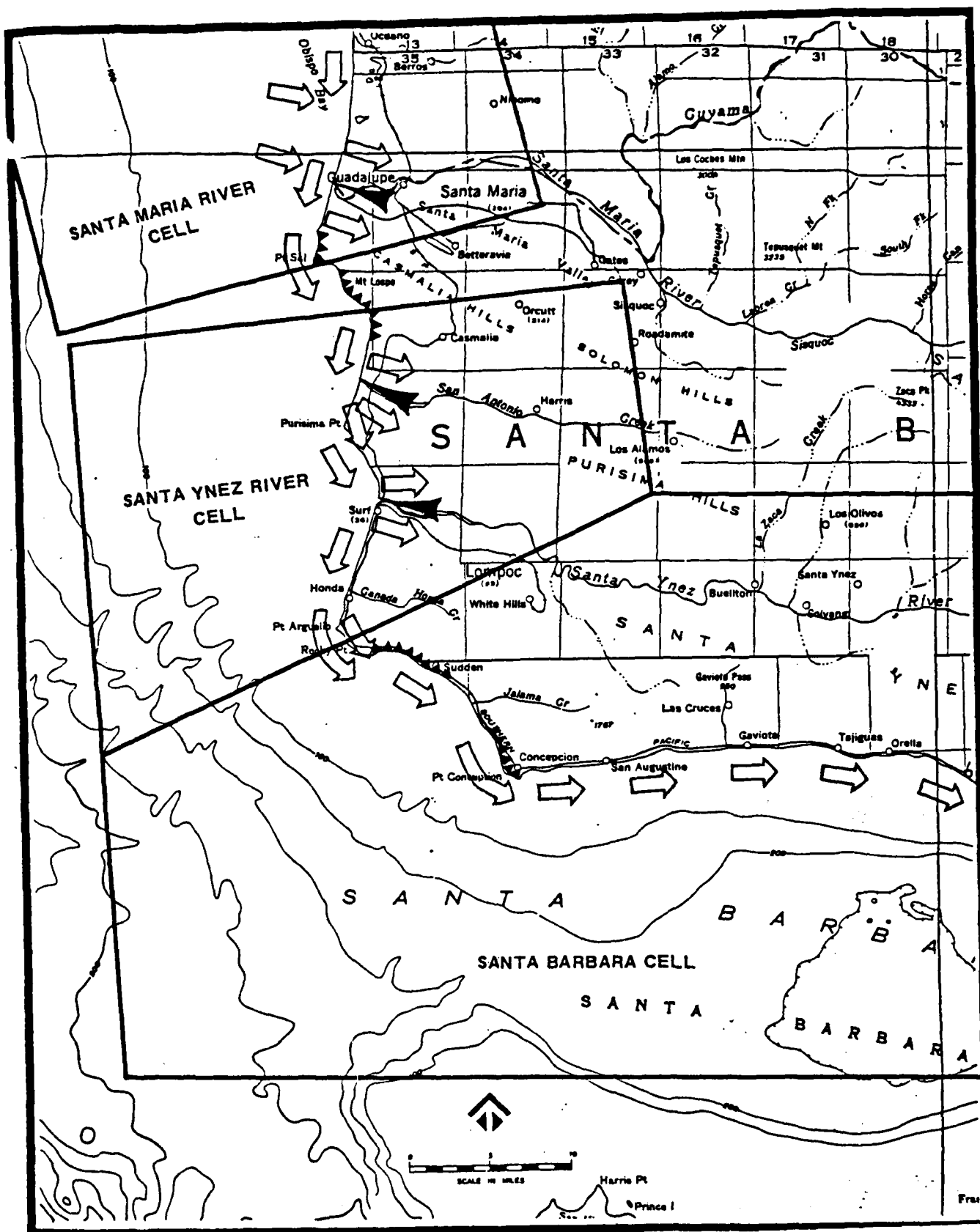


Figure 4.2 South Central Region

Source: Calif. DNOD Atlas of Shoreline Erosion

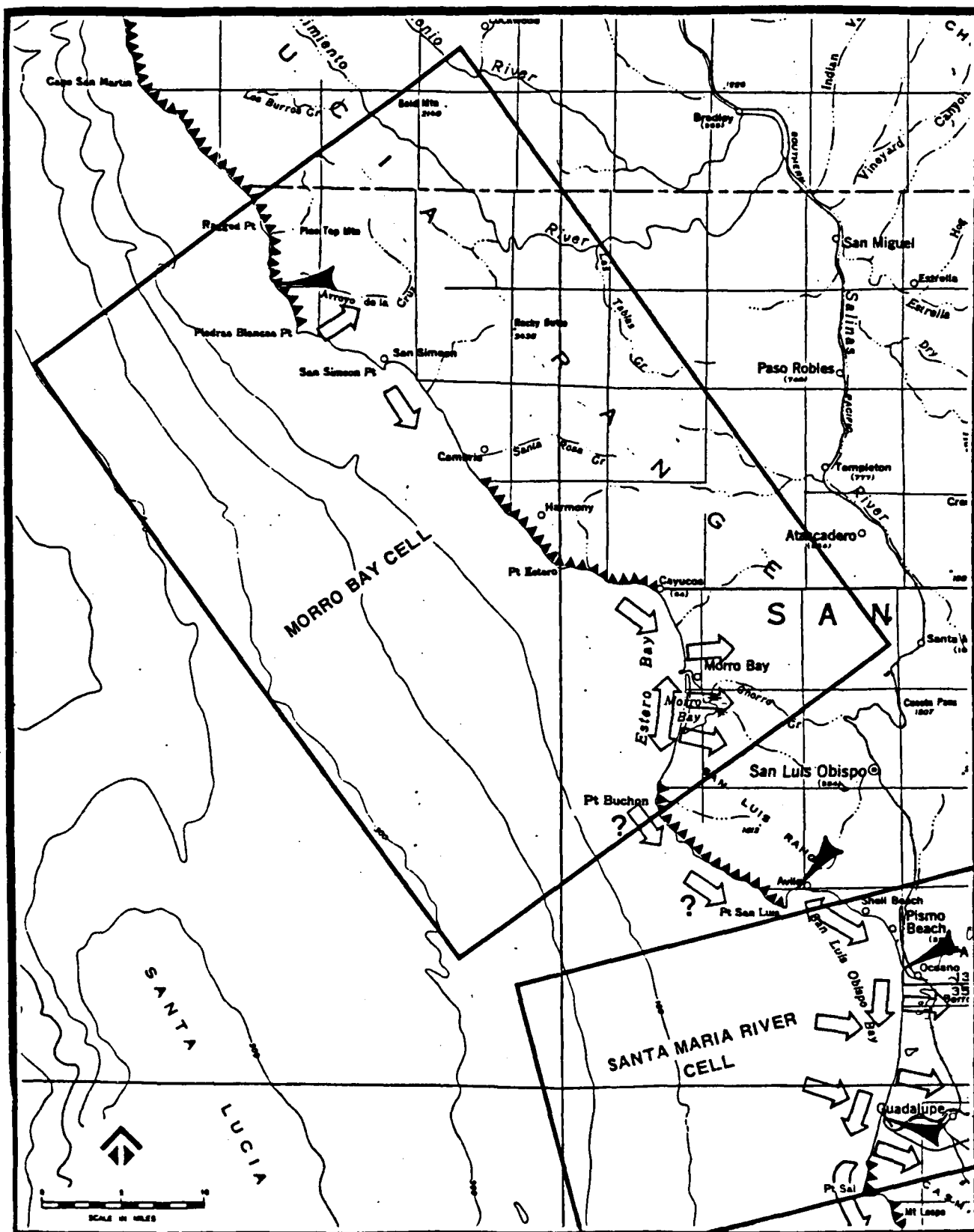


Figure 4.3 South Central Region

Source: Calif. DNOB Atlas of Shoreline Erosion

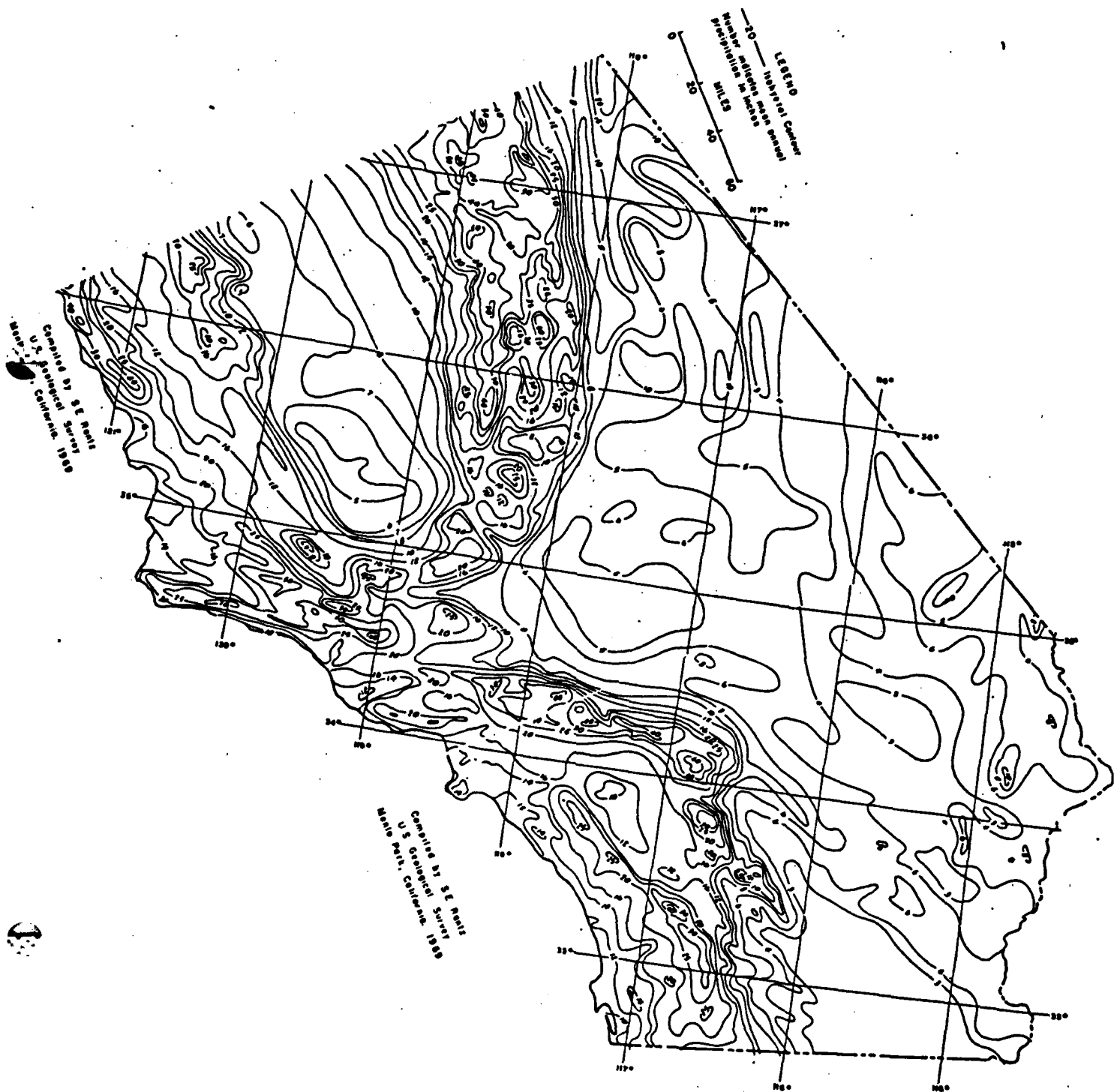


Figure 4.4 Isohyetal Contours, Southern California

Source: Goodridge (1981a)

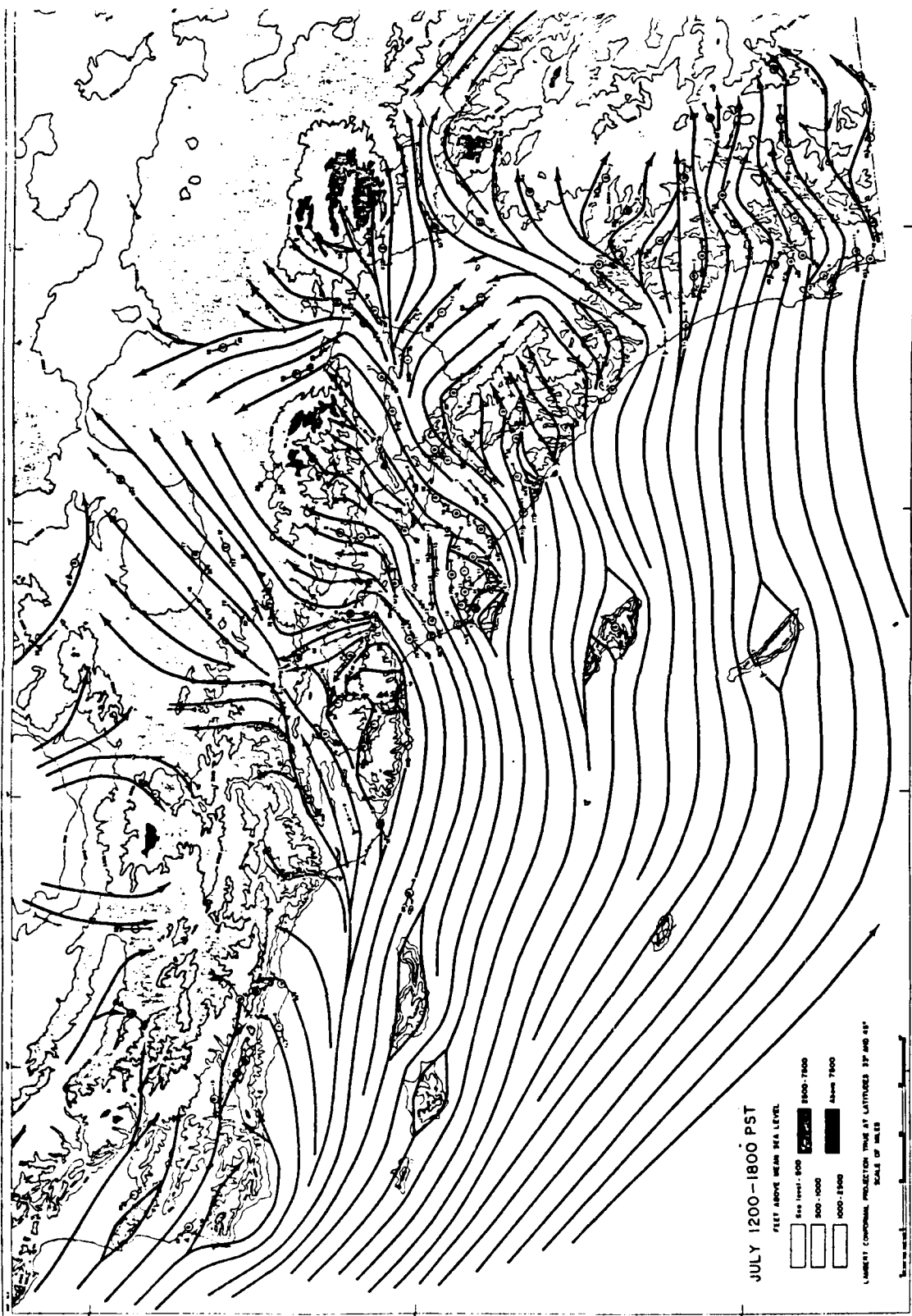


Figure 4.5 Typical Summer Streamlines,
South Central Region

Source: DeMarrais et al. (1965)

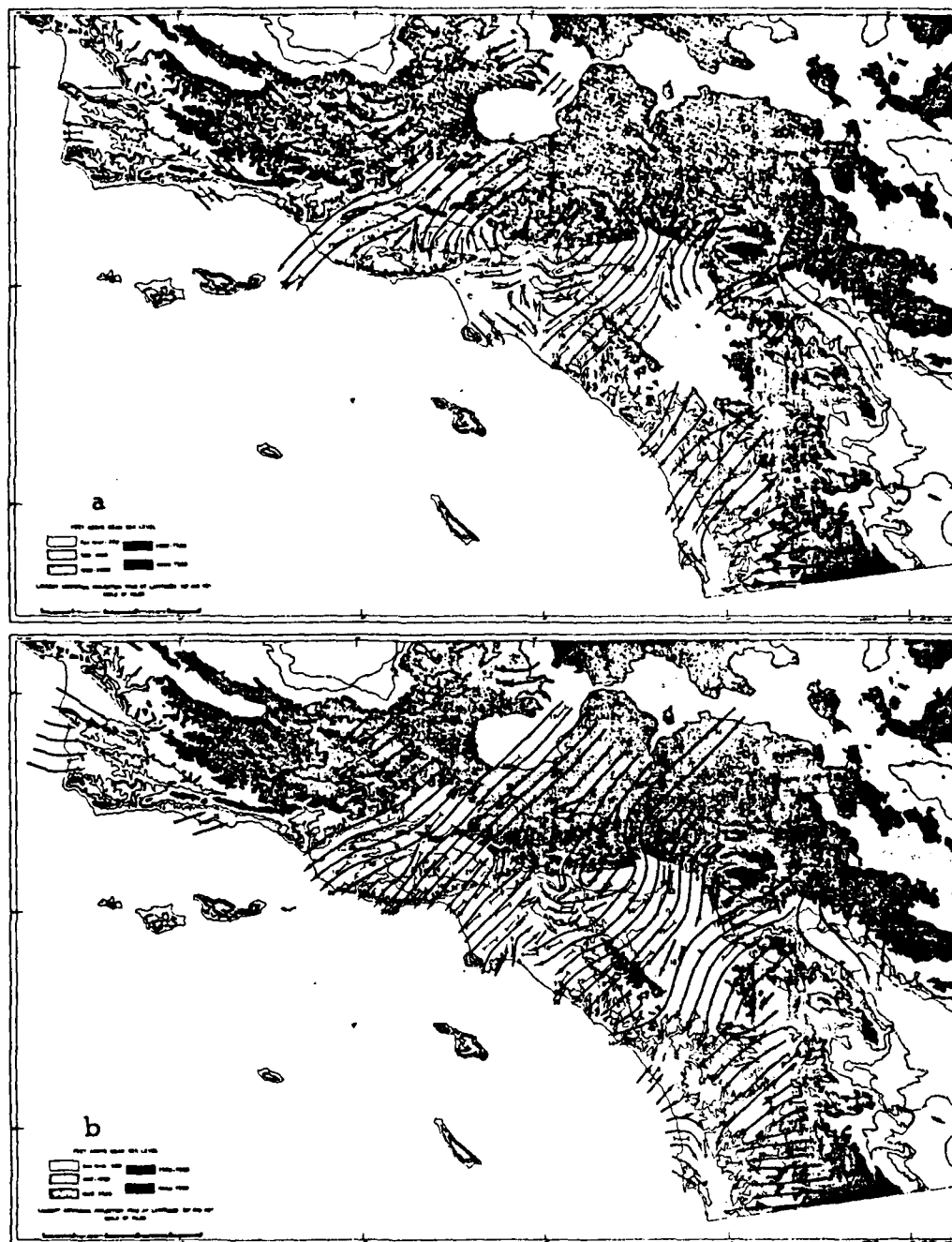


Figure 4.6 Streamlines, Santa Ana Conditions
 South Central Region
 Source: DeMarrais et al. (1965)

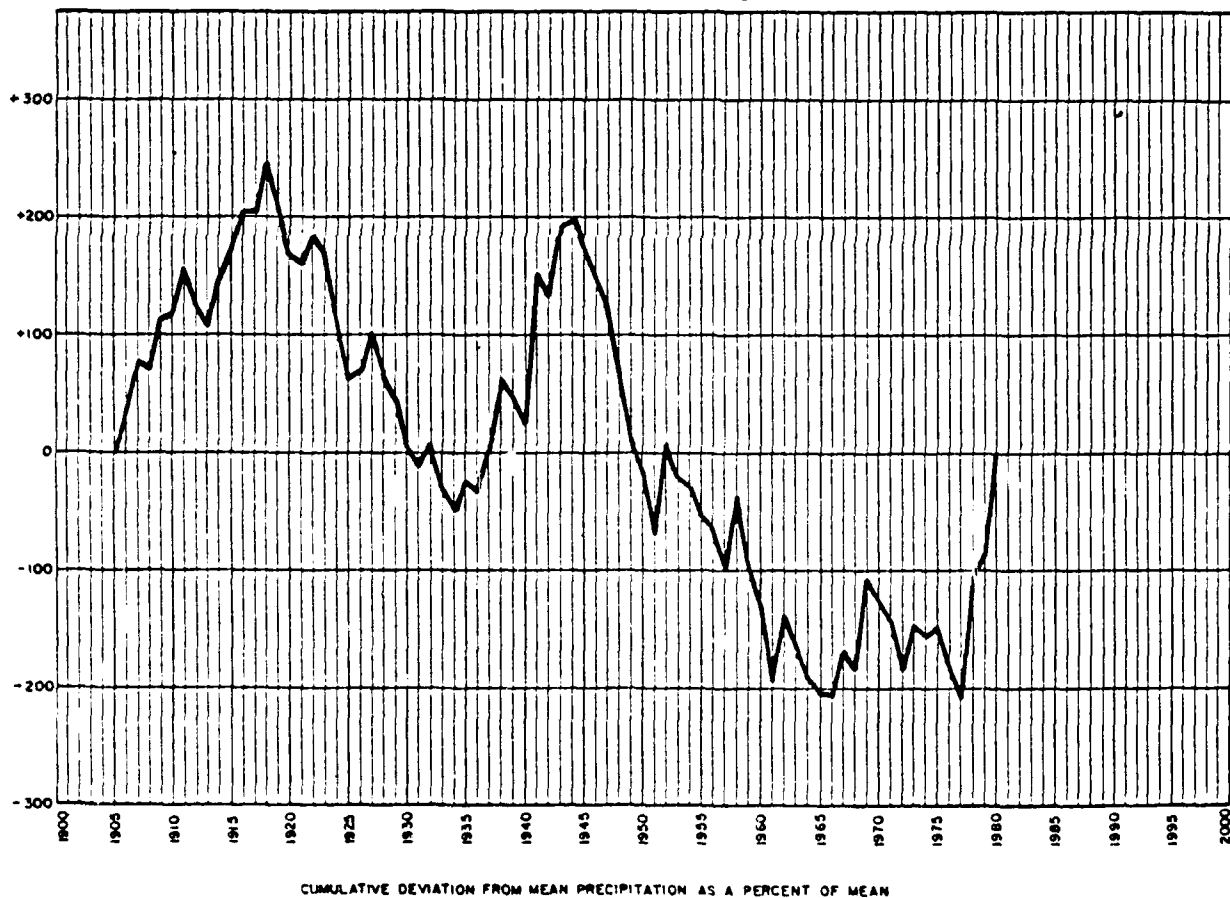
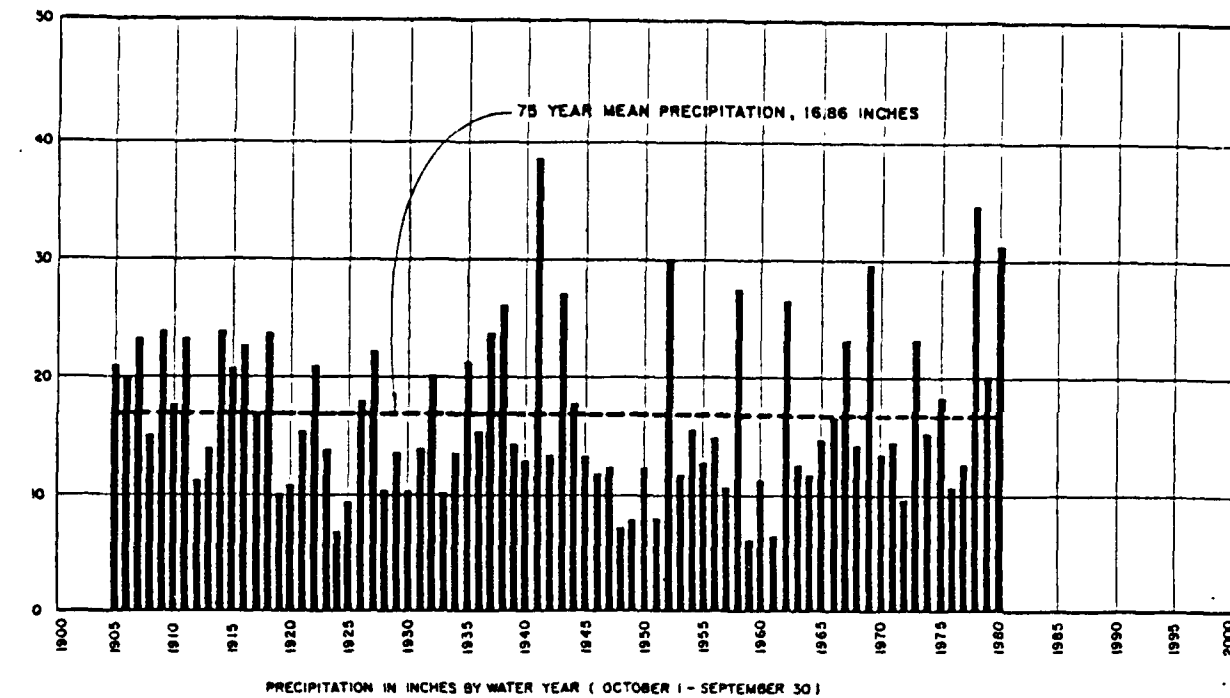


Figure 4.7 Cumulative Departure

From Mean Rainfall, Ventura County

Source: Ventura County Flood Control &
Water Resources Dept.

TABLE 4.1

Major Drainage Areas of the South Central Region

Basin or Group	Littoral Cell	Drainage Area Mi2	Controlled Area Mi2	Percent Controlled
Morro Bay Group	Morro Bay S Morro Reach	575	20	3
Arroyo Grande Creek	Santa Maria	190	70	37
Santa Maria River	Santa Maria	1873	1120	60
San Antonio Creek	Santa Ynez	206	-	-
Santa Ynez River	Santa Barbara	901	421	47
Santa Ynez Mtns Grp	Santa Barbara	420	2	-
Ventura River	Santa Barbara	275	94	34
Santa Clara River	Santa Barbara	1690	590	35
Calleguas Creek	Santa Barbara	323	-	-
Total		6453	2317	36

Source: Brownlie and Taylor (1981)

TABLE 4.2

Precipitation at Selected Stations, South Central Region

Location, DWR no.	Elevation, Feet	Precipitation (in.)		Years of Record	Latitude, Longitude
		Average	Maximum : Minimum		
Hearst Castle, 3888-02	1800	31.4	61.5 : 10.4	33	35-41-12 121-10-12
San Simeon 7885-11	16	19.1	33.5 : 11.9	39	35-38-24 121-11-36
Morro Bay 5866-00	115	15.6	29.6 : 7.1	22	35-22-00 12-51-00
San Luis Obispo 7851-00	298	21.6	54.6 : 7.3	111	35-18-20 120-39-47
Santa Maria 7940-00	223	13.6	30.7 : 6.1	76	34-57-00 120-26-00
Ozena 6576-00	3704	13.0	27.1 : 4.6	51	34-42-33 119-19-00
Juncal Dam 4422-00	2060	27.6	64.2 : 10.4	36	34-29-00 119-31-00
Santa Barbara 7902-00	16	15.4	36.9 : 6.9	37	34-25-00 119-42-00
Ventura 9285-00	46	15.2	36.7 : 5.2	106	34-16-36 119-17-30
Ojai 6399-00	784	21.4	48.0 : 6.8	72	34-26-48 119-14-31
Oxnard 6569-00	49	14.3	38.2 : 5.5	51	34-12-05 119-10-30
Gorman 3511-11	3580	12.0	31.2 : 4.8	38	34-47-16 118-49-55
Elizabeth Lk 2734-25	2073	21.9	43.5 : 10.2	49	39-40-00 118-21-45
Bouquet Res 1013-00	3054	16.1	33.0 : 6.9	46	34-35-14 118-21-45
Thousand Oaks 6905-00	800	14.5	31.9 : 5.5	17	34-10-43 118-51-00

Source: Calif DWR Bull 230-81

AD-A167 645

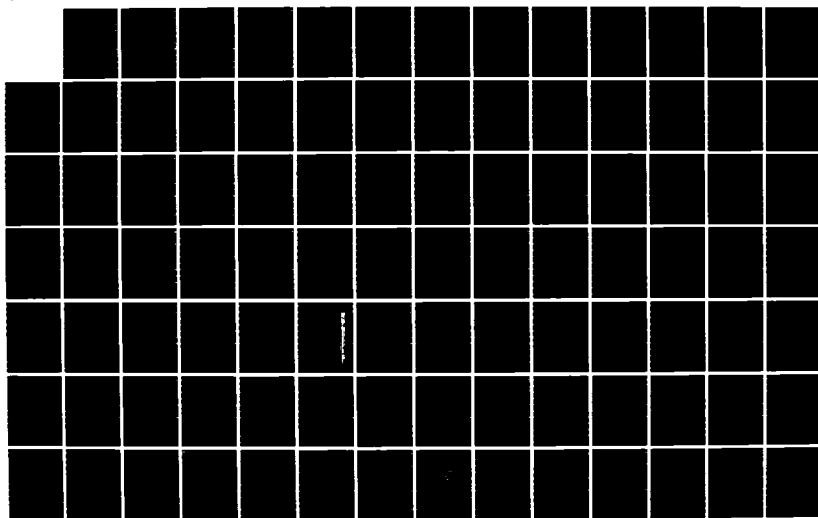
METEOROLOGICAL DATA INVENTORY SOUTHERN CALIFORNIA
COASTAL ZONE RAGGED POI. (U) DHA CONSULTING ENGINEERS
MARINA DEL REY CA DEC 85 COE/SPLPD/C-CCSTWS-85-7
DACW89-85-D-0010

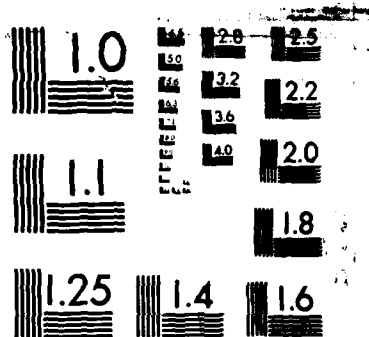
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MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

TABLE 4.3

Mean Monthly Precipitation* at selected stations, South Central Region

Location	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
San Luis Obispo	4.6	4.0	3.2	2.3	0.3	.05	.04	.01	.15	0.7	2.6	4.0
Santa Maria	2.3	2.4	2.0	1.3	0.2	.04	.03	.02	0.1	0.5	1.4	2.1
Ozema	2.4	2.5	2.0	1.0	0.3	.05	.06	0.1	0.2	0.5	0.8	2.3
Juncal Dam	6.7	5.7	3.8	2.7	0.3	.06	.01	0.	0.2	0.5	3.8	4.4
Pt. Arguillo	2.6	2.5	2.3	1.5	0.2	.04	.03	.01	.06	0.7	1.6	2.3
Santa Barbara	3.5	3.0	2.4	1.5	0.2	.03	.04	.01	.07	0.4	1.9	2.5
Ventura	2.8	2.6	2.3	1.3	0.1	.04	.01	0.	.04	0.3	1.9	2.2
Ojai	4.6	4.2	3.0	2.1	0.3	.04	.02	.01	0.2	0.4	2.7	3.2
Oxnard	3.1	2.8	2.2	1.4	0.1	.04	.01	.01	.06	0.3	1.9	2.5

*1941-1970

Source: Calif DWR California Rainfall Summary, 1981
Goodridge (1981)TABLE 4.4
AVERAGE WIND SPEED, MPH
SOUTH CENTRAL REGION

LOCATION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
Pt. Mugu	10	9	10	10	9	8	7	8	7	7	7	5	8
Santa Maria	6	6	7	7	7	7	6	5	5	5	6	6	6

Source: Goodridge (1978)

TABLE 4.5
PERCENT WIND, MEAN SPEED
SOUTH CENTRAL REGION

LOCATION	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM
Pt. Mugu % Mean Speed (mph)	8.0 4.0	7.3 4.7	7.7 7.0	4.5 8.8	1.3 5.7	0.8 6.6	2.2 8.6	2.9 7.5	4.2 6.6	2.8 6.2	3.2 6.1	5.2 6.8	18.7 8.2	7.8 7.1	4.5 4.6	4.1 4.1	14.8
Santa Barbara % Mean Speed (mph)	2.3 6.7	2.8 6.1	4.5 5.5	4.4 6.2	4.8 7.2	3.8 8.1	6.5 7.4	5.5 7.3	4.5 6.8	3.9 7.0	6.1 7.7	10.0 9.1	6.6 9.2	2.4 9.4	2.1 8.5	1.6 8.9	28.0
Vandenberg % Mean Speed (mph)	8.0 7.2	2.5 6.0	3.2 3.5	2.4 3.3	5.2 4.4	3.1 6.5	4.2 6.8	1.4 6.0	2.1 4.2	1.0 3.7	2.9 4.2	2.4 5.1	5.6 7.6	9.7 11.7	22.2 12.7	13.2 10.9	11.0

Source: Goodridge (1978)

TABLE 4.6
PERCENT HIGH WIND, PEAK GUST
SOUTH CENTRAL REGION

LOCATION	%>17	%>28	PEAK GUST (MPH)	MONTH OF MAX % >17k
Santa Maria	3.9	0.12	46 (fastest mi.)	May (9.9%)
Vandenberg	3.5	2.3	51	May (10.4%)
Santa Barbara	1.0	0.01	N/A	March (2.4%)
Pt. Mugu	6.9	0.72	70	Nov. (16.3%)

Source: Goodridge (1979)

TABLE 4.7
MAJOR STORMS IN THE SOUTH CENTRAL REGION

DATE	WATERSHED(S) AFFECTED	REMARKS
Dec. 1861-Feb. 1862	All	Heavy continuous rain, severe floods
Feb. 1884	All	Continuous rain, severe floods
Jan. 9, 1907	Santa Ynez River	4 day storm, 11.8" rain at San Marcos Pass
Jan.-Mar. 1909	Santa Maria River	Series of storms
Jan. 1914	Santa Barbara	4" in 2 hours at Santa Barbara
Feb. 28, 1914	All	3 day storm, 10" at Ventura
Mar. 2, 1938	All	4 day storm, heavy floods
Jan. 15, 1952	All	4 day storm, 15" at San Marcos Pass
Nov. 20, 1967	Santa Barbara, Ventura River, Santa Clara R.	4 day local storm
Jan.-Feb. 1969	All	Heavy floods, record rainfall, 3 storms, well documented
Jan.-Mar. 1978	All	Series of storms well documented
Jan.-Feb. 1980	All	Series of storms well documented
Feb.-Mar. 1983	All	Series of storms

TABLE 4.8
SELECTED RAIN GAGES, SOUTH CENTRAL REGION

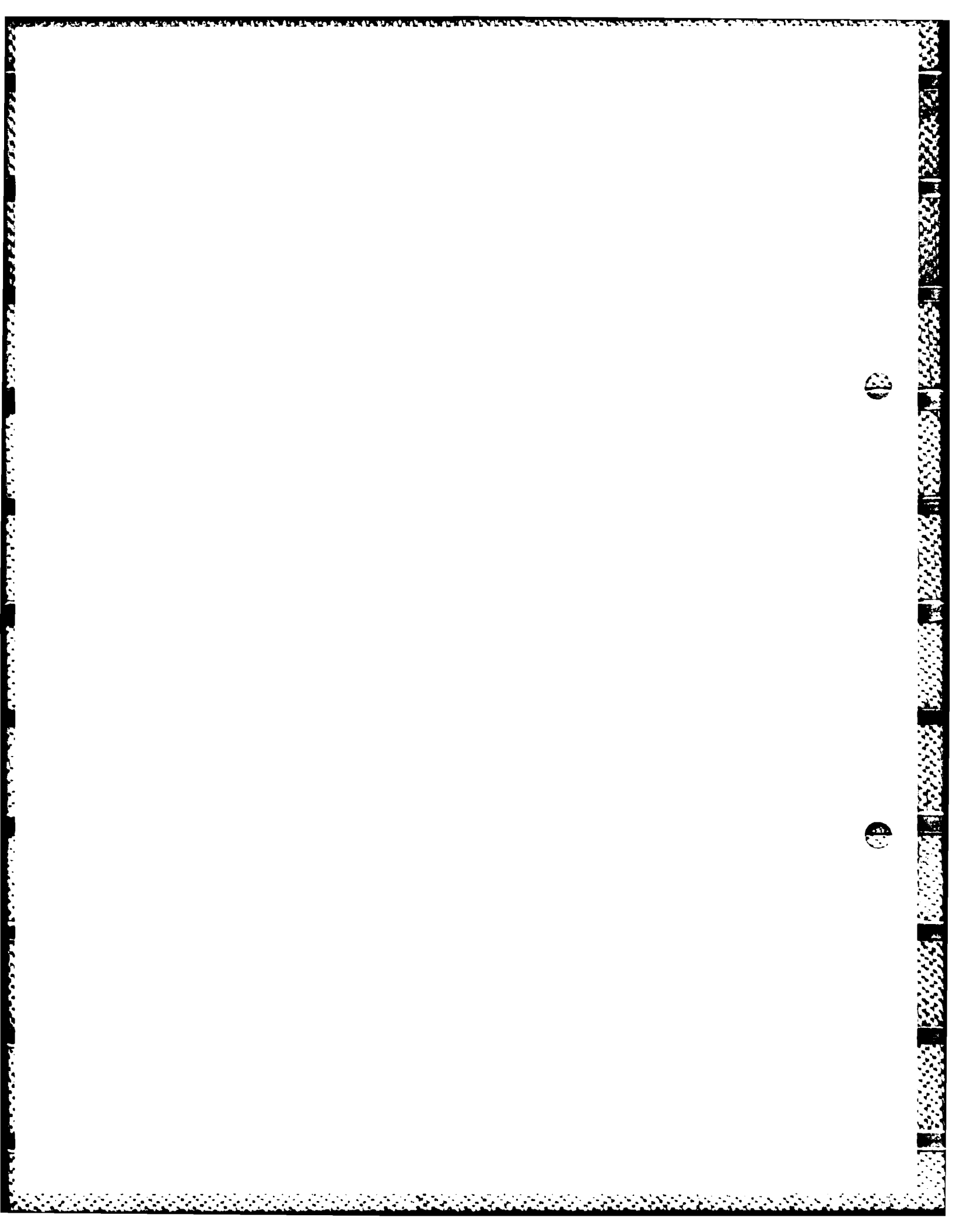
STATION	AGENCY	PERIOD OF RECORD		TYPE	DWR #	OTHER #
		AGENCY	RECORD			
Morro Bay 3N	SLOC		1929-	S	5869-00	052.0
San Luis Obispo Poly	SLOC		1870-	R	7851-00	001.0R
Nipomo 2NW	NWS		1921-	S	6207-00	(SLOC) 038.0
Sisquoc Ranch	SBC		1904-	S	---	415 SIR
Ozena	NWS		1904-	S	6576-00	(SBC) 399 OZA
Lompoc Sewage	NWS		1919-		5064-00	
Santa Barbara	NWS		1868-	R	7902-00	(SBC) 225 SBS
Ventura	NWS		1874	S	9285-00	(VC) 66
Ojai V.C. F.S.	NWS		1906	S	6399-00	(VC) 30
Newhall SPRR Depot	CDWR		1877-1950	S	6159-01 6159-03	---
Acton Escondido Cyn	NWS		1938-	S	0014-00	---

Sources: Calif DWR Bulletin 230 -81
Santa Barbara County Flood Control and Water
Conservation District (SBC)
San Luis Obispo County Flood Control and Water
Conservation District

TABLE 4.9
COASTAL WIND STATIONS, SOUTH CENTRAL REGION

STATION	AGENCY	PERIOD OF RECORD	WBAN #	LAT/LONG	REMARKS
Pt. Piedras Blancas	CG	1938-1974	23267	35 40' 121 17'	Most data are synoptic observation
Pt. San Luis	CG	1943-1951	23268	35 10' 120 46'	1943-46 hourly wind
Santa Maria	WBAS	1938-	23236	34 56' 120 25'	inland, but long record
Pt. Arguello	AFB	1925-1965	23265	34 33' 120 36'	hourly 1944,59-64
Vandenberg	AFB	1958	93214	34 43' 120 34'	long term hourly records
Santa Barbara	FAA	1929-	23190	34 26' 119 50'	long term hourly records
Ventura Marina	CG	1976-	---	34 15' 119 16'	
Port Hueneme	NF	1938-1941	93183	34 09' 119 12'	
Pt. Mugu	NF	1946-	93111	34 07' 119 07'	long term hourly records
Morro Bay	SLOC	1975-	---	35 22' 120 51'	
Grover City	SLOC	1982-	---	35 07' 120 37'	
El Capitan	SBC	1979-	---	34 27'41" 120 01'45"	
Goleta	SBC	1975-	---	34 26'44" 119 49'30"	
Vandenberg-Watt Rd.	SBC	1980-	---	34 46'51" 120 36'23"	
El Rio	VC	1982-	---	34 15'15" 119 08'36"	
Ventura	VC	1984-	---	34 17'24" 119 18'49"	

CG = Coast Guard
WBAS = Weather Bureau Airports Stations
AFB = Air Force Base
FAA = Federal Aviation Administration
NF = Naval Facility
SLOC = San Luis Obispo County APCD
SBC = Santa Barbara County APCO



5.0 OCEAN STORMS

A. General Description of Oceanic Storm Regions

A.1 Types of Storms Affecting the California Coast

Waves which affect the California Coast are formed by storms far out to sea and by local winds. The latter, referred to as wind waves, are largely produced by the local prevailing winds, which are dominated by the eastern North Pacific High. These winds are generally from the northwest along the California coast, except in Southern California, where they are often influenced by the California eddy and southwesterly winds often prevail in this area. Mean annual wind speeds are about 8 knots north of San Francisco, 10 knots from San Francisco to Point Arguello and about 6 knots along the Southern California coast.

In addition to wind waves, storms at sea produce swell which can affect the coast. During the late fall, winter, and early spring, swell from North Pacific predominates. Southerly swells occur during summer and fall as a result of tropical storms in the eastern North Pacific and extratropical storms in the South Pacific. The following is a brief description of the types of storms which affect the coast.

A.1.1 High-Latitude North Pacific

These storms are generated when there is a blocking high in the Pacific east of 160° W. Cyclogenesis occurs in the vicinity of the Gulf of Alaska, and the storms generally track along the Aleutian Islands towards Canada. Waves from this type of storm affect the entire coast, although portions of Southern California are sheltered by the westward bulge of the coastline at Point Conception.

A.1.2 Mid-Latitude North Pacific

This type of storm is caused by low pressure in the eastern Pacific, frequently with a blocking high over western North America. Storms move across the Pacific at mid-latitudes and generate swell predominantly from the west. The swell from this type affects the entire coast, although the coastal islands protect Southern California.

A.1.3 Low-Latitude Type

These storms form when there is a blocking high between 160°W and 180° W. Storms are usually generated in the Hawaiian region and track to the northeast. Swell arrives from a generally west and southwest direction, affecting the entire coast, but Southern California is especially vulnerable to this type.

A.1.4 Eastern Pacific Tropical Storms

These storms are generated in the late summer and early fall. The normal storm track is in a westerly or northwesterly direction, and swell generally arrives from the south, south-southeast, or south-southwest. Swell from these storms affects primarily the coast along Southern California.

A.1.5 Southern Hemisphere Storms

The storms, whose swells affect the California coast from the south, generally occur in the South Pacific Ocean during the Southern Hemisphere winter. Important generation areas include the New Zealand area and the high-latitude region of the South Pacific. Swell from the New Zealand area is generally of long period and arrives from the southwest, while swell from the high-latitudes arrives from the south to southwest.

A.2 General Climate of the North Pacific

An excellent summary of the climate of the Pacific Ocean is found in the U.S. Navy Marine Climatic Atlas of the World.

A.2.1 Winter Climate, North Pacific

Because of the moderating effect of the ocean, air temperatures in the Pacific have relatively small variations. Air temperatures range from about 38°F in the north to about 75°F at 20°N.

The North Pacific High is usually centered near 30°N latitude, with a strong low near the Aleutian Islands. There is a large variation in wind patterns due to periodic storm passage. Gales occur with a frequency of 10 to 20 percent in the Gulf of Alaska and in the western North Pacific. Low pressure centers generally move to the west or northwest.

A.2.2 Summer Climate, North Pacific

In summer, the Pacific High is generally located around 40°N, which pushes storm tracks to the north avoiding the California area. Air temperatures are again relatively constant, with mean temperatures of about 55°F in the Gulf of Alaska rising to about 80°F at 20°N. Winds are generally light in the vicinity of the Pacific High, and the frequency of gales is very low.

A.2.3 Winter Climate, South Pacific

This season, corresponding with the California summer, finds a high pressure off the coast of South America at about 25°S. Surface winds are varied because of storms. The frequency of gales is greater than 10% over most of the ocean south of 50°S.

Sixty to eighty percent of all gales in the New Zealand area have winds from the southwest, which means there is a large probability that gales in this region will generate swell directed towards the California coast.

A.2.4 Summer Climate, South Pacific

In the Southern Hemisphere summer, the semi-permanent high off the coast of South America moves slightly south to about 30°S. Gales are still relatively frequent in the high latitudes, but winds are generally generated from the northwest or west, creating waves which do not affect the California coast.

A.3 Effects of Normal and Abnormal Storm Tracks

Griggs and Johnson (1983) examined wave damage in the Monterey Bay area, and concluded that there was no consistent pattern. They found that the number of storms affecting the bay is large, and that waves which damage one section may cause little or no damage elsewhere. However, there has been no definitive study of historical storm patterns as related to damage over large or small areas of the coast.

There are some abnormal tracks, however, which have caused damage. Several studies (Rosendal, 1963; Hansen, 1972) have shown that the usual tracks of tropical storms is to the west, with some slight curvature to the northwest. An abnormal track has strong recurvature to the north, which puts the storms close to, or into, Southern California. The 1939 hurricane which struck Long Beach is an example.

A second type of track which adversely affects the California coast is that of the low-latitude type storms. Although these storms normally track to the

northeast, a slightly low track puts the low pressure center over California. The combination of the long fetch, high winds and low pressure on the coast (which raises the tide level) can cause severe damage. This was the case during the 1983 storm series.

B. Historical Perspective

B.1 Major Periods of Intense Oceanic Storms

Unfortunately, there is no definitive history of major storm periods which have affected the California coast. Kuhn and Shepard (1981) have researched this topic, but most information prior to very recent times is of a qualitative nature.

Kuhn and Shepard (1981) describe an important storm period which was described by Richard Henry Dana in the 1830's. During that era, "southeasters" were not uncommon from November to April in the Southern California region. These storms developed rapidly and produced waves of 50 feet or more; the weather was described as worse than that of Cape Horn. These storms ceased to be a regular occurrence in 1856. Kuhn and Shepard (1981) note that species of sub-tropical fish were identified near San Diego between 1853 and 1857, indicating that the coastal waters were much warmer in that period.

Since this early period, major storm periods seem to have been limited to seasonal anomalies which have produced major erosional problems. Kuhn and Shepard (1981) found that among the most notable of these was the December 1940 through January 1941 period, during which a series of severe storms, originating south of the Aleutian Islands, created high waves which attacked the coast. In addition, they note the 1977-78 and 1980-81 storm periods, during which a series of storms generated in the Hawaiian region caused extensive damage to the California coast. To these periods should be added the 1969, 1978 and 1983 storm seasons.

As noted by Kuhn and Shepard (1981) abundant information exists, primarily in newspaper files, but little attention has been given to documenting this subject.

B.2 Major Individual Storms

This subject is also poorly documented, but there have been a few recent studies. Howe (1978) has examined newspaper and other accounts to document some major damaging storms along the California Coast. Table 3 from his report is reproduced herein as Table 5.1. In addition, a book about to be released by Duke University Press, Living With the California Coast (Gary Griggs, ed.) contains some historical information on storms affecting the California Coast.

Studies on wave damage in limited areas of the California coastline have included some storm history. Among these studies are those of Bixby (1962) and Griggs and Johnson (1983) on the Monterey Bay area, and Tuttle (unpublished c. 1975) on the Humboldt region. However, little work has been done to systematically document wave damage along the coast, much less the storms which produced the waves (Kuhn, 1985; Tuttle, 1985; Griggs, 1985; personal communications). As might be expected, the area with the least information concerns tropical and,

especially, Southern Hemisphere storms. Until recently (with the exception of the hurricane which struck Southern California in 1939) most large waves from the south are described in accounts as "presumably" originating from Southern Hemisphere storms.

C. Data Search and Retrieval Efforts

C.1 Technical Approach

Data were examined from a number of governmental and public organizations. Previous reports and documents on similar topics were located and examined as part of a literature search. These documents often contained or referred to data, whose sources were noted. Government and public agencies were then contacted, and in some cases visited.

The following is a general description of sources relevant to storms in the Pacific Ocean which produce waves damaging to the California coast.

National Climatic Data Center

This agency has become the "clearing house" of climatic data obtained by United States Government Agencies, and has cooperative programs with international and foreign agencies as well. Data cover wide areas, and are discussed in detail in Section C.2. Data are available in a variety of forms, including hardcopy, microforms and magnetic tape. Most out of print documents are available on microforms, and most recent data are available both on microforms and magnetic tape.

Scripps Institution of Oceanography

An on-going program of wave data collection and analysis is a good source of wave data. Monthly and annual reports are published (Seymour et al.) and data are available on magnetic tape.

Continuing research is being conducted on storm history and the relationship of storm periods to geologic events.

People contacted include:

Gerald Kuhn (storm history) (619) 452-4856

Julie Thomas (wave data) (619) 452-3032

U.S. Navy Fleet Numerical Oceanography Central

Data available from this agency are also available from the National Climatic Data Center.

People contacted include:

Lt. D. Pedneau (408) 646-2418

Chief Mate Boushaued (Naval Oceanographic Command Facility, San Diego) (619) 437-7071

National Weather Service

Data from this agency are available through the National Climatic Data Center.

People contacted include:

Art Lessard (Chief Meteorologist) (213) 209-7215

Robert de Violini, (Climatologist, Pacific Missile Range, U.S. Navy, Pt. Mugu) (805) 989-8383

Don Tuttle (Humboldt County Public Works, Natural Resources Division, coastal storm history) (707) 445-7741

Prof. Gary Griggs, University of California, Santa Cruz (coastal storm history) (408) 429-2403

There are several reference libraries which are extremely useful.

These include:

University of California, Los Angeles, Engineering Library

This library has extensive collections of relevant journals and National Weather Service (Weather Bureau) publications. In addition, there is a vast collection of government documents on microfiche. Microfiche reproductions are available.

National Weather Service, Wilshire Federal Building

The reference room (normally closed to the public) has an extensive, uncataloged collection, including Mariners Weather Log, out-of-print publications and unpublished documents.

C.2 Data Available on Ocean Storms

The best single source of data is the National Climatic Data Center (NCDC). The following is a description of data available for various storm regions.

C.2.1 Mid-Latitude North Pacific Ocean

A general summary of the climate of this region can be found in the U.S. Navy Marine Climatic Atlas of the World, volume II. This atlas gives summaries by month of surface winds (wind roses), gale frequency by region, precipitation (with wind direction), mean level pressure and mean storm tracks, areas of cyclogenesis with direction frequency as well as other climatological data. This publication was updated in 1977 and is available on microfiche (NTIS no. AD-A072 498).

An excellent reference for mean storm tracks is that of Klein (1957). This atlas gives mean storm tracks and areas of cyclogenesis and probabilities of low pressure cells by month.

The Mariners Weather Log, published quarterly since 1957, gives North Pacific cyclone-track charts and summaries of weather conditions (monthly) as well as other relevant data. These publications could be useful in determining the source of damaging waves.

Marine Climatological Summaries are published in cooperation with the World Meteorological Organization. These summaries include frequency tables for various meteorological and oceanographic parameters. Data used to produce these summaries are available on magnetic tape from the NCDC. Data are from ships logs, weather buoys and meteorological services (1970 through the present, tape TD-1129; 1800-1969, tape TD-9760).

Daily synoptic weather maps are available from 1899 to the present on microforms from the NCDC. The data include sea level maps and 500-millibar maps (starting in 1944). These data are also available in published form (UCLA Engineering Library).

Digitized extratropical cyclone movements are available from the NCDC on magnetic tape (TD-9616). Data are from May 1965 to December 1974.

The large quantity of data may seem somewhat overwhelming, and unfortunately little has been done with particular periods of storms which have produced damaging waves. Summaries of recent storm events (e.g. Pappas, 1978; 1980) present general information but little of what would be of direct use in predictions or in relating present storm events to past events.

C.2.2 Tropical Storms

There are several studies which document tropical storms in the eastern North Pacific Ocean. Court (1980) documents storms from 1840 and gives statistical data. Hansen (1972) used satellite coverage to document the climatology of these storms in terms of frequency, duration, intensity, tracks, formation areas, dissipation areas and recurvature. Hurd (1929) provides some data on early storms.

The Mariner's Weather Log provides tropical storm tracks and data annually. Publications after 1972 are available on microfiche from the NCDC.

Statistical data summaries on tropical storms are available in the Mariner's Worldwide Climatic Guide to Tropical Storms at Sea, available from NTIS on microfiche or paper copy. (The data are also available on magnetic tape from NCDC, tape TD-9636). Data include track and frequency maps, cyclone roses, as well as narrative descriptions and photographs, and sea surface conditions.

Tropical cyclone tracks from 1949 to the present are available on magnetic tape from the NCDC (tape TD-9697). Data include date, position, wind speed, and

pressure four times per day. North Pacific Tropical Cyclone Vector Mean Charts covering the period 1949-1971 are also available from the NCDC on microfiche.

Surface pressure charts, with fronts, troughs and ridges depicted are available for the tropical regions of the world (30°N to 50°S). Satellite wind measurements from low-level clouds are included. The charts are analyzed for 0000 GMT and 1200 GMT for 1969 to 1978, and every six hours from 1978 to the present.

C.2.3 Southern Hemisphere Storms

This area of the ocean is the least studied and documented.

A good summary of the climate of this region is given in the U.S. Navy Marine Climatic Atlas of the World, volume V. This publication was updated in 1979 and is available on microfiche (NTIS no AD-A089 035). Data in the atlas include surface wind roses, gale roses (limited), precipitation and mean sea level pressure, along with other climatological data.

Constant pressure charts off the Southern Hemisphere for 500-, 300-, and 250-millibars are available from the NCDC from 1975 to the present. These charts are on microfilm. In addition, surface/1000-500 millibar thickness charts are available for the Southern Hemisphere, also on microfilm from the NCDC. The periods of record available are 1967-1971 and from 1975 to the present.

Marine Atlas data from 1800 to the present are available on magnetic tape. Data are from ships logs, ship weather observations, weather buoys, and foreign meteorological services. These tapes are available from the NCDC (TD-9760, TD-1129).

There are also a number of data and research publications on Southern Hemisphere weather patterns by H. Van Loon.

C.2.4 Other Pertinent Data

Heights of wind waves, swell and combined sea are depicted with contour lines on daily charts of the Northern Hemisphere. These charts are available on microfilm from the NCDC from 1979 to the present. These data can be used in conjunction with the weather charts also available from the NCDC to determine wind, storm and wave relationships for particular storms or storm periods.

Deep-water wave statistics for the California coast have been compiled for the period 1946 to 1977 by Meteorology International Inc. (1977). These data could be used with oceanic storm statistics of the same period to develop correlations.

D. Data Gaps and Limitations

The most serious problems with the data available is the lack of a definitive history of coastal storms. While small areas of the coast have been covered (e.g., Monterey Bay), there is a need for a thorough cataloging of coastal storms and storm damage. Sources would include newspapers from coastal cities, long time residents, harbor masters, local fishermen, and previous studies. Once there is an historical reference point, meteorological data can be collected for important, and even lesser, storms which have affected the coast. With the availability of current data base systems, a cataloging by area affected, storm origin, track, intensity, etc., could be made. This would greatly aid in developing statistical information on potential storm damage.

Recent on-going data collection at the Scripps Institution of Oceanography on waves could be combined with meteorological data now available from the NCDC on the South Pacific Ocean to gain some insight on South Pacific storms. This area is poorly studied and of importance, particularly with respect to extreme waves in the California summer as well as the moderate swell which often arrives.

With the advent of satellites and computers, the North Pacific is, in principle, well documented. However, the quantity of data available is almost overwhelming. It is for this reason that a clear objective is needed in any attempt to unravel the data and present a coherent picture. It is for this reason that a complete storm history is needed. It can provide the basis for further studies, in that once major storm damage areas, with dates, are identified, one can track the storm, and storm waves, back to their origins with existing data.

The South Pacific remains poorly documented, with very few data available before 1950. There is little that can be done to remedy this; however, one can attempt to use the recent data available to its fullest extent. Many of the data are available on magnetic tape, and wave data from Scripps are also available on magnetic tape. The wave data could be searched for significant southern swell, and this information used to select dates and regions for selective acquisition of meteorological data.

TABLE 5.1

Damaging Storms, California Coast
From Howe (1978)

<u>Date</u>	<u>Newspaper Account</u> ^b
February, 1878	Breakers over the bar in San Francisco prevented the passage of ships.
December, 1887	Surf broke over the high bluffs near the hotel (in San Diego).
August, 1934	Storms generated the highest breakers in years. Coastal damage extended from Malibu to south of Newport. \$100,000 loss in Long Beach where the Pine Avenue pier was destroyed. Railroad tracks near San Clemente were undermined.
1932	A Pacific Ocean hurricane (Cimbasco) off the west coast of southern Mexico migrated northward along the California coastline as far as Los Angeles. This is the only known record of a cimbasco hitting California, and it "wreaked great havoc throughout southern California coastal areas."
December, 1940	Towering breakers and a 7.1 foot high tide washed over the Mission Beach (San Diego) seawall, throwing concrete benches into lots and homes. Public Works crews placed 600 tons of rip rap to dissipate wave energy. Sand, rocks, and tons of kelp had to be removed from streets and beaches. The conditions were caused by storms swinging in from lower latitudes instead of the Gulf of Alaska. At this time, it was the wettest December in Weather Bureau history (in San Diego).
February, 1957	High tides (5.7' to 6.9'), coupled with storms and winds, undermined homes at San Diego's Imperial and Mission Beaches and in Oceanside.
February, 1960	30 to 40 foot waves pounded the coastline from Monterey to the Oregon border. Homes were damaged or destroyed in Monterey, Santa Cruz, San Mateo County, and Stinson Beach. This was one of the most damaging and costly storms to hit this part of the California coast.
December, 1962	15 foot waves observed at La Jolla and Coronado.
December, 1968	High tide of 7.7' and 40 mile per hour winds battered the Del Mar coast. There was some property damage and tons of mud were washed into the surf zone.
December, 1969	16 to 20 foot waves were observed at Oxnard. Many homes were damaged and flooded. Seabees from Port Hueneme worked to construct an emergency seawall. Wave borne debris slowed traffic on U. S. 101.

notes: a) partial listing taken from the San Diego Union, the Los Angeles Times, the Ventura Star Free Press, and the San Francisco Chronicle

b) no attempt was made to interpret the descriptive wording used in the newspaper articles.

c) from Magura, 1978

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APPENDIX A

SAN DIEGO REGION

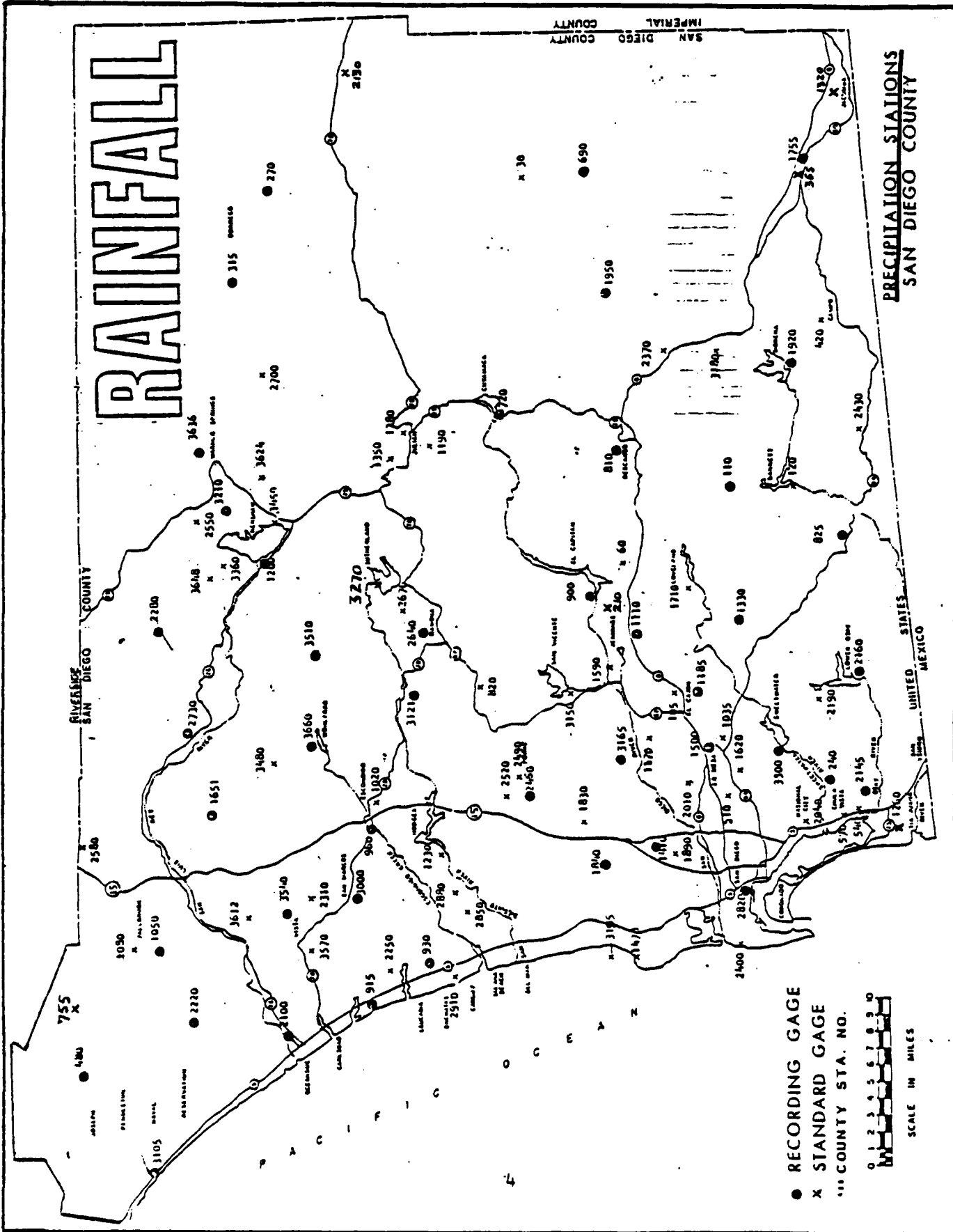
1. Wind Stations in the San Diego Region whose data are available from the National Climatic Data center. Other wind stations are listed in Table 2.9. Appendix D contains an Index for the entire state.
2. Precipitation gages in San Diego County, with location map, from San Diego Flood Control District. Followed by typical data (monthly).
3. Precipitation gages in the San Diego Region from California Department of Water Resources Bulletin 230-81.

1. Wind Stations in the San Diego Region whose data are available from the National Climatic Data center. Other wind stations are listed in Table 2.9. Appendix D contains an Index for the entire state.

LOCATION	AGENCY NUMBER	LATITUDE	LONGITUDE	HOURLY RECORD START	RECORD STOP	OBS/DAY	DIGITIZED RECORD
Dana Pt.	CG	33-27	117-41	1981		3	-
San Mateo Pt.	CG	33-23	117-35	1971	1979	5	-
San Clemente	CG	33-25	117-37	1980		3	-
Oceanside	CAN 23181	33-14	117-25	1928	1930	6	
Oceanside	CG	33-13	117-24	1971	1952	24	1948-1952
Carlsbad	SAUR	33-08	117-17	1974		3	-
				1959			-
				1973	1976	24	-
Del Mar	NAAF 25198	32-58	117-15	1943	1945	24	-
Mission Bay	CG	32-45	117-14	1975		3	-
San Diego	NAS 93112	32-43	117-12	1922		24	1905-
San Diego	WBO	32-43	117-10	1888	1940	charts	-
San Diego Linderoan	WEAS 23186	32-44	117-10	1929		24	1942-
Imperial Beach	NAAS 93115	32-34	117-07	1943		6	
	NAS			1956	1971	24	1952-

2. Precipitation gages in San Diego County, with location map, from San Diego Flood Control District. Followed by typical data (monthly).

PRECIPITATION STATIONS
SAN DIEGO COUNTY



<u>STATION</u>	<u>PERIOD</u>	<u>AVERAGE RAIN INCHES</u>	<u>STATION</u>	<u>PERIOD</u>	<u>AVERAGE RAIN INCHES</u>
60 Alpine	1942-79	17.87	2050 Oak Grove	1957-80	17.28
90 Anza	1946-79	11.82	2070 Oceanside	1953-78	10.12
120 Barrett Dam	1909-79	17.17	2130 Ocotillo Wells	1945-74	2.52
210 Blossom Valley	1944-80	15.06	2150 Otay Ranch	1938-80	10.79
240 Bonita-Allen School	1919-80	10.85	2160 Lower Otay Resv	1907-80	11.51
315 Borrego Palm Canyon	1950-80	5.58	2190 Upper Otay Resv	1939-77	11.77
365 Boulevard 2	1936-79	14.35	2220 Lake O'Neill	1877-1979	13.38
420 Campo	1889-1979	17.20	2280 Palomar Mountain	1939-80	27.23
510 Chollas	1940-79	10.74	2310 Pechstein Reservoir	1956-79	12.48
540 Chula Vista	1918-79	9.63	2370 Pine Valley Co Pk	1951-80	20.21
690 Crawford Ranch	1947-78	3.60	2400 Pt Loma Nelson	1954-80	10.74
720 Cuyamaca Reservoir	1887-1980	38.74	2430 Potrero County Park	1916-80	18.54
755 De Luz Garnsey	1930-80	19.76	2490 Poway Valley	1957-79	12.29
810 Descanso RS	1933-80	24.66	2580 Rainbow Camp	1952-76	16.52
900 El Capitan Reservoir	1936-80	16.01	2700 Ranchita	1947-80	13.62
1020 Escondido	1875-1979	15.63	2790 Rodriguez Resv	1936-80	8.56
1050 Fallbrook	1880-1980	16.98	2820 San Diego WSO AP	1850-1979	9.79
1170 Gillespie Field	1952-1979	10.76	2880 San Dieguito Resv	1927-80	13.19
1200 Henshaw Reservoir	1911-80	26.49	3060 San Mateo	1957-79	14.43
1230 Hodges Reservoir	1919-79	14.28	3150 San Vicente Resv	1946-79	13.95
1260 Imperial Beach NAS	1956-80	8.49	3180 Sawday Ranch	1950-80	17.59
1500 La Mesa Fire Sta	1934-80	12.81	3195 Scripps Pier	1928-80	9.10
1590 Lakeside 2E	1953-79	14.09	3270 Sutherland Resv	1944-79	21.64
1710 Loveland Resv	1943-77	13.88	3300 Sweetwater Resv	1888-1980	10.91
1770 Marron Valley	1891-1980	14.58	3540 Vista E Reservoir	1936-80	13.03
1800 Mecca Fire Sta	1915-79	2.86	3624 Warner Ranch	1957-80	20.08
1840 Miramar NAS	1946-80	10.61	3636 Warner Springs	1906-78	16.13
1920 Morena Resv	1903-80	20.46	3648 West Fork	1949-80	23.36
2010 Murray Resv	1913-79	12.08	3660 Wohlford Resv	1948-80	17.32
2040 National City FD	1932-77	8.42			

AVERAGE ANNUAL RAINFALL TABLE -- STATIONS WITH MORE THAN 20 YEARS

MONTHLY AND SEASONAL PRECIPITATION 1977-78

San Diego County

STA NO.	SOURCE	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	SEASON TOTAL
C = INCOMPLETE														
30	AGUA CALIENTE SPRINGS PARK	10	.77	3.27	.00	.10	.00	2.05	2.56	1.70	1.84	.24	.00	12.53
60	ALPINE	10	.03	3.09	.01	.90	.42	3.49	7.37	7.31	9.68	1.92	.38	34.60
90	ANZA	60	.00	2.46	.00	.07	.60	8.45	3.66	7.04	1.69	.19	.00	24.16C
110	BARRETT CAMP	60	.00	1.90	.00	.40	.20	3.00	8.60	7.30	7.50	1.30	.30	30.60
120	BARRETT	20	.00	2.28	.00	.48	.23	3.46	8.95	6.58	8.65	1.92	.73	33.28
210	BLISSON VALLEY	20	.00	1.91	.00	.88	.43	3.09	6.22	6.50	8.23	1.58	.35	29.19
240	BUNITA-ALLER SCHOOL	40	.00	1.90	.00	.79	.09	2.42	5.57	3.55	4.71	1.19	.13	20.35
270	BORNEGO C.R.S.	40	.15	3.26	.00	.04	.00	.89	2.27	1.64	1.09	.07	.00	9.41
315	BORNEGO PALM CANYON	50	.00	4.70	.00	.10	.00	1.60	4.40	2.50	1.50	.00	.00	14.80
365	BOULEVARD 2	50	.75	2.60	.00	.13	.21	3.72	7.04	5.95	5.69	1.95	.26	28.30
420	CAMP	60	.00	1.18	.00	.88	.25	7.79	5.38	5.45	1.48	.53	.00	22.94C
480	CASE SPRINGS	60	.00	2.64	.00	.19	.22	5.47	14.18	10.28	12.72	1.70	.03	47.43
510	CHOLLAS	20	.00	1.57	.00	1.43	.04	2.27	6.42	5.68	1.24	.00	.00	18.65C
540	CHULA VISTA	20	.00	2.00	.00	.74	.12	2.11	4.30	2.55	4.34	.96	.05	17.17
570	CHULA VISTA FIRE DEPT.	10	.00	1.98	.00	.80	.23	2.63	5.46	3.22	5.45	1.33	.00	21.10
690	CRAWFORD HANCH	10	.03	5.70	.00	.00	.00	.00	2.21	1.20	.89	.00	.00	10.03
720	CUYANACA RESERVOIR	55	.00	3.80	.00	1.10	.60	7.40	14.50	12.70	16.00	4.40	.60	61.10
755	DE LUZ GANNSEY	55	.00	2.14	.00	.00	.00	5.61	11.62	10.57	14.88	2.14	.06	47.02
810	DESCANSO R.S.	50	.00	1.70	.00	.90	.40	6.40	9.70	10.40	10.70	3.20	.60	44.00
820	DUS PICUS COUNTY PARK	50	.00	2.22	.00	.00	.59	3.89	12.31	6.91	10.88	2.37	.28	39.45
825	DULZURA-FLUME	40	.00	2.00	.00	.20	.30	3.70	8.00	8.50	5.30	1.20	.10	29.30
900	EL CAPITAN RESERVOIR	40	.00	2.10	.00	.60	.20	3.30	7.70	7.40	7.70	1.70	.30	31.00
915	ENCINA W.P.C.F.	50	.00	2.30	.00	.10	.00	1.70	7.50	4.40	5.20	1.40	.00	22.60
930	ENCINITAS C.R.S.	50	.00	2.15	.00	.06	.05	1.89	9.67	4.47	4.78	.86	.01	23.96
960	ESCONDIDO NO. 2	55	.00	2.10	.00	.10	.10	2.50	6.20	2.20	8.90	1.20	.10	23.40

R.S. = Ranger Station

MONTHLY AND SEASONAL PRECIPITATION 1977-78

SIA NO.	SOURCE	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	SEASON TOTAL
									C = INCOMPLETE					
1020	ESCONDIDO	.00	2.13	.00	.10	.28	2.52	11.09	5.73	8.35	1.03	.11	.00	31.34
1035	EUCALYPTUS PARK	.00	2.34	.00	.00	.00	3.10	5.41	6.00	6.59	1.84	.00	.00	25.28
1050	FALLBROOK	.30	2.10	.00	.20	.00	4.20	15.20	9.00	8.00	1.70	.00	.00	40.70
1080	FALLBROOK FIRE DEPT.	.01	2.19	.00	.02	.00	2.94	12.05	7.75	7.91	1.35	.05	.00	34.27
1110	FLINN SPRINGS PARK	.00	1.70	.00	.69	.14	2.98	5.86	6.33	7.21	1.20	.29	.00	26.40
1170	GILLESPIE FIELD	.00	1.77	.00	.87	.02	2.34	5.97	3.99	6.76	1.20	.14	.00	23.06
1185	GRANITE HILLS	.00	1.70	.00	.70	.10	2.90	6.00	4.70	7.30	.90	.00	.00	24.30
1190	H.M. HEISE COUNTY PARK	.00	3.80	.00	1.11	.48	6.92	14.29	11.09	13.02	4.53	.62	.00	55.86
1200	HENSHAW RESERVOIR	.00	4.00	.00	.20	.30	5.10	12.30	10.60	11.70	2.30	.20	.00	46.70
1230	HODGES	.00	1.25	.00	.14	.03	2.32	10.34	5.05	6.42	1.74	.35	.00	27.64
1260	IMPERIAL BEACH M.A.S.	.00	2.04	.01	.78	.02	1.75	3.06	2.22	3.84	.79	.07	.00	14.62
1320	JACUHA	.09	2.13	.00	1.06	.08	2.79	3.91	2.19	2.70	.87	.19	.00	16.01
1330	JAMUL-LAS FLORES	.00	1.60	.00	1.07	.16	2.46	5.65	5.41	6.65	1.52	.43	.00	24.95
1350	JULIAN WINDLA	.00	3.25	.00	.67	.57	4.98	13.77	9.40	11.67	2.83	.79	.00	47.93
1380	JULIAN BUNCH	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02C
1410	KEARNY MESA	.00	1.82	.00	.47	.07	2.21	7.82	4.93	6.22	.75	.27	.00	24.56
1470	LA JOLLA - MCCAULEY	.00	2.36	.02	.30	.00	2.43	10.99	3.60	7.11	1.11	.00	.00	27.92
1500	LA MESA PS	.00	.18	.00	.90	.00	2.70	7.10	5.20	7.10	1.40	.10	.00	24.68
1590	LAKESIDE ZL	.00	1.68	.00	1.00	.06	3.36	5.21	6.49	8.48	1.52	.24	.00	28.04
1620	LEMON GROVE FIRE DEPT.	.00	1.73	.00	.67	.08	2.79	6.97	4.70	7.39	1.73	.08	.00	26.14
1651	LILAC OAKS	.00	1.90	.00	.00	.30	2.60	10.20	7.50	8.10	1.30	.20	.00	32.10
1755	MANTANITA J.CRT.	.40	2.60	.00	1.30	.20	3.60	6.10	5.00	4.60	1.20	.20	.00	25.20
1770	MARRON VALLEY	.00	1.50	.00	.30	.30	3.40	8.50	5.70	6.80	1.30	.20	.00	28.00
1800	MECCA FIRE STATION	.00	.00	.00	.00	.00	.68	1.83	.17		.05	.00	.00	2.73C
1830	NINAHAM DAM	.00	1.85	.00	.20	.02	2.30	9.05	5.21	7.83	1.38	.02	.00	27.86

MONTHLY AND SEASONAL PRECIPITATION 1977-78

STA NO.	SOURCE	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	SEASON TOTAL
C = INCOMPLETE														
1840	MIRAMAR N.A.S.	.00	1.42	.00	.37	.01	2.46	7.92	4.29	7.22	2.28	.24	.00	26.21
1890	MONTGOMERY FIELD	.00	1.62	.00	.41	.00	3.03	8.57	4.72	6.55	1.14	.11	.00	26.15
1920	MORENA RESERVOIR	.20	1.40	.00	.90	.40	4.70	9.50	8.30	9.10	2.10	.50	.00	37.10
1950	MOUNT LAGUNA	.70	5.20	.10	.70	.30	5.00	8.50	9.40	8.60	1.90	.20	.00	40.60
2010	MURRAY	.00	1.59	.00	.51	.00	2.09	6.40	4.15	7.23	1.10	.18	.00	23.25
2070	OCEANSIDE	.00	2.81	.00	.04	.00	1.88	7.95	5.49	6.73	1.20	.03	.00	26.13C
2100	OCEANSIDE PUMPING PLANT	.50	2.40	.20	.10	.00	2.80	9.60	6.90	6.90	.50	.00	.00	29.90
2150	OTAY RANCH	.00	2.33	.00	1.04	.04	2.31	5.31	3.49	5.37	2.22	.23	.00	22.34
2160	LOWER OTAY RES.	.00	1.80	.00	.60	.10	2.70	5.50	4.00	5.70	1.40	.10	.00	21.90
2190	UPPER OTAY	.00	1.74	.00						5.70			.00	7.44C
2220	LAKE D'NEILL	.00	2.08	.00	.22	.00	2.25	9.71	7.04	6.53	.84	.00	.00	28.67
2280	PALMAR MOUNTAIN	.10	4.40	.00	.30	.30	7.90	20.10	15.90	15.70	3.90	.10	.00	68.70
2310	PECHSTEIN RESERVOIR	.00	1.86	.00	.00	.15	2.71	9.76	4.71	6.81	1.23	.05	.00	27.28
2370	PINE VALLEY COUNTY PARK	.32	1.72	.00	.51	.48	3.97	9.00	9.77	7.97	1.94	.57	.00	36.25
2380	POINT LOMA - ANDERSON	.00	2.15	.07	.81	.08	2.65	7.11	5.31	5.93	.68	.00	.00	24.79
2400	POINT LOMA - NELSON	.00	2.77	.04	.34	.07	2.21	7.04	4.71	6.57	.00	.00	.00	23.75
2430	POUREND CU. PARK	.00	2.03	.00	1.01	.43	3.38	8.37	6.52	8.79	1.92	.33	.00	32.78
2460	POWAY C.R.S.	.00	12.90	.00	.00	.00	2.50	9.40	5.10	7.30	1.30	.20	.00	38.70
2490	POWAY VALLEY	.00	1.32	.00	.15	.17	2.97	10.50	5.50	7.60	1.15	.26		29.62C
2530	POWAY - WILLIAMS	.00	1.56	.00	.00	.27	2.41	9.87	5.33	8.32	1.56	.27	.00	29.59
2550	PUEBLO LA CRUZ	.15	4.70	.00	.25	.15	4.51	11.22	7.18	7.82	1.47	.15	.00	37.60
2580	RAINBOW CAMP	.00	.00	2.40	.18	.03	3.53	.00	.00	.00	1.26	.07	.00	7.47
2640	RANOMA C.H.S.	.00	1.45	.00	.20	.28	2.78	9.99	6.30	8.75	1.47	.22	.00	31.44
2700	RANCHITA	.60	3.98	.00	.19	.00	2.92	6.45	6.48	3.39	.92	.26	.00	25.19
2730	RINCON SPRINGS	.00	2.20	.00	.00	.20	3.10	11.40	6.40	8.10	1.40	.10	.00	32.90

MONTHLY AND SEASONAL PRECIPITATION 1977-78

STA NO.		JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	SEASON TOTAL
		C = INCOMPLETE												
2790	RODRIGUEZ	55	.00	1.99	.00	.36	.39	2.59	4.37	4.38	3.94	.84	.06	.00 18.92
2850	SAN DIEGUITO PARK	10	.00	1.88	.01	.14	.02	2.19	9.06	6.32	3.98	.84	.10	.00 24.54
2880	SAN DIEGUITO RESERVOIR	10	.00	1.87	.00	.10	.02	2.14	10.32	4.50	6.51	1.41	.11	.00 26.98
2910	SAN ELIJU W.P.C.F.	10	.00	1.94	1.94	.00	.02	2.06	8.92	4.85	4.29	.57	.00	.00 24.59
3000	SAN MARCUS C.M.S.	10	.00	1.52	.00	.03	.15	2.02	8.94	4.80	5.87	1.34	.10	.00 24.77
3060	SAN ATEU	20	.00	1.98	.00	.05	.20	3.18	9.97	6.36	7.49	1.55	.03	.00 30.81
3105	SAN JUDITH SCALE	20	.00	3.50	.00	.00	.00	1.90	10.10	6.30	5.60	1.70	.00	.00 29.10
3121	SAN PASQUAL-JUDSON	40	.00	1.78	.00	.17	.15	2.09	8.44	4.74	7.59	1.36	.11	.00 26.43
3150	SAN VICENTE	40	.00	2.29	.00	.60	.15	3.57	10.56	7.39	8.91	1.61	.26	.00 35.34
3165	SANTEE LAKES	55	.00	1.60	.00	.70	.00	2.70	9.30	5.40	8.60	.30	.10	.00 28.70
3180	SANDAY RANCH	55	.15	1.02	.00	.66	.16	3.84	9.54	7.25	7.84	1.64	.50	.00 32.60
3195	SCRIPPS PIER SRG	10	.00	1.83	.00	.39	.00	2.73	7.29	.00	.00	.71	.04	.00 12.99
3210	SHIP	10	.04	3.71	.00	.27	.14	3.44	8.22	6.59	6.62	1.38	.32	.00 30.73
3270	SUTHERLAND	20	.00	3.32	.00	.20	.25	5.24	12.22	8.59	10.55	2.46	.45	.00 43.28
3300	SWEETWATER	20	.00	1.90	.00	1.07	.11	2.48	4.89	4.24	4.52	1.17	.06	.00 20.44
3360	TEN FOOT WEIR	31	.04	4.57	.00	.30	.00	4.71	12.21	8.93	9.22	2.53	.48	.00 42.99
3450	V-DITCH	31	.00	4.60	.00	.24	.25	4.24	10.57	8.40	9.92	2.20	.35	.00 40.77
3480	VALLEY CENTER 2 NNE	60					.00	6.78	9.65	1.58				18.01C
3510	VINEYARD RANCH	60	.00	1.80	.00	.10	.60	4.40	12.00	8.80	10.00	1.90	.30	.00 39.90
3540	VISTA E RESERVOIR	40	.00	1.88	.00	.16	.39	1.94	9.68	4.99	6.30	1.41	.00	.03 26.78
3612	VISTA 2 NNE	40	.00	1.78	.00	.01	.00	2.33	9.08	4.87	6.84	1.52	.05	.00 26.48
3624	WARNER RANCH	31	.15	5.87	.00	.10	.20	4.10	10.30	8.31	9.31	1.90	.33	.00 40.57
3636	WARNER SPRINGS	31	.40	3.20	.00	.20	.10	.00	12.40	7.70	8.10	1.40	.10	.00 33.60
3648	WEST FORK	31	.05	4.20	.00	.27	.30	5.45	13.16	10.23	6.81	2.63	.05	.00 43.15
3660	LAKE WOLFORD	31	.00	2.10	.00	.30	.00	3.70	10.70	7.00	9.60	1.10	.20	.00 34.70

3. Precipitation gages in the San Diego Region from California
Department of Water Resources Bulletin 230-81

TABLE 8. PRECIPITATION STATIONS BY AREAL CODE (continued)

AREAL CODE	DWR STATION NUMBER	STATION NAME	LATITUDE DEG° MIN' SEC"	LONGITUDE DEG° MIN' SEC"	TOWNSHIP & RANGE	ELEVATION	RECORD		MAXIMUM PRECIPITATION		MINIMUM PRECIPITATION		MEAN ANNUAL	YEARS OF RECORD
							YEAR BEGIN	YEAR END	MAX. ANNUAL	YEAR OCCUR	MIN. ANNUAL	YEAR OCCUR		
Y-02.A2	7221-01	RAILROAD CANYON DAM INC	33-40-28	117-16-26	06S/04W-5	439	1927	1978	606.9	1941	86.1	1928	256.5	51
	8650-50	SUN CITY STP	33-41-44	117-12-32	05S/03W-5	430	1971	1978	295.5	1977	149.3	1972	236.8	7
	8650-55	SUN CITY	33-42-07	117-14-22	05S/03W-5	465	1974		194.6	1974				
	8650-75	SUN CITY S D F	33-42-55	117-11-25	05S/03W-5	435	1974	1978	270.9	1975	229.9	1974	236.2	4
Y-02.A3	9722-00	WINCHESTER-BLACKMORE-RRNG	33-42-35	117-04-50	05S/02W-5	450	1940	1976	527.1	1941	98.8	1961	241.9	23
Y-02.A4	4062-03	HOMELAND IN SEC 17	33-48-18	117-06-45	05S/02W-5	479	1962	1978	508.6	1969	183.3	1971	283.4	15
	4717-30	LAKEVIEW MCDONOUGH	33-50-00	117-07-00	04S/02W-5	447	1910	1939	656.1	1922	154.1	1934	329.8	27
	6299-20	MUVIEW - CDF FIRE STA	33-49-03	117-07-55	04S/02W-5	445	1958	1978	544.6	1969	102.1	1959	266.5	20
Y-02.A5	6816-10	PERRIS DAM	33-50-58	117-09-52	04S/03W-5	482	1972	1973	194.9	1973				
	3896-00	HEMET - LHMWD OFFICE	33-44-53	116-56-40	05S/01W-5	504	1911	1980	655.4	1922	122.0	1961	319.1	68
	4431-00	JUNIPER FLATS	33-45-49	117-04-57	05S/02W-5	643	1964	1978	547.4	1969	180.1	1971	314.6	12
	4814-15	LA SIERRA RCH FARRAR	33-45-00	117-00-06	05S/01W-5	472	1918	1939	655.4	1922	115.1	1934	298.6	21
Y-02.B1	4979-20	LITTLE LAKE SDF	33-44-42	116-55-53	05S/01W-5	517	1960	1979	661.5	1978	141.9	1961	301.2	18
	4979-40	LITTLE VALLEY SDF	33-44-42	116-55-53	05S/01W-5	517	1961	1975	458.6	1969	141.9	1961	270.8	15
	7613-11	RYAN FIELD	33-43-48	117-01-17	05S/01W-5	460	1956	1979	673.5	1978	91.5	1961	271.8	23
	0606-00	BEAUMONT	33-55-44	116-58-27	03S/01W-5	796	1888	1978	870.9	1978	188.0	1970	457.6	90
Y-02.B2	0609-12	BEAUMONT S D F	33-55-47	116-57-00	03S/01W-5	792	1957	1978	796.9	1969	159.5	1961	413.4	21
	1698-01	CHERRY VALLEY FS	33-58-32	116-58-20	02S/01W-5	872	1956	1978	963.5	1969	198.3	1961	458.7	22
	1698-02	CHERRY VALLEY LEE	33-58-19	116-58-24	02S/01W-5	860	1956	1965	717.7	1958	203.7	1961	394.0	9
	2324-00	DECKERS RANCH IDYLLWILD	33-48-00	116-45-00	04S/02E-5	1692	1920	1941	1658.2	1941	545.0	1928	966.4	21
	3414-50	GILMAN HOT SPRINGS	33-50-00	116-59-17	04S/01W-5	448	1944	1977	585.5	1958	137.9	1961	294.2	33
	4208-00	IDYLLWILD - WILSON	33-44-47	116-42-51	05S/03E-5	1641	1901	1912	1135.8	1906	371.3	1904	701.2	10
	4211-00	IDYLLWILD FIRE DEPT RS	33-42-47	116-43-24	05S/07E-5	1645	1901	1980	1180.9	1980	208.1	1961	656.3	49
	4258-11	INDIO	33-42-48	116-13-25	05S/07E-5	2	1951	1978	159.3	1976	13.0	1972	65.3	27
	4839-60	LAWLER CO PARK	33-47-40	116-44-41	04S/02E-5	1612	1975	1978	858.2	1976	540.3	1977	699.3	2
	5840-60	MORENO VALLEY	33-56-27	117-08-14	03S/02E-5	561	1976	1978	381.1	1976	330.3	1977	355.7	2
	7058-80	POPPET FLATS TERRIBILINI	33-50-53	116-51-34	04S/01E-5	1073	1937	1978	1144.6	1937	346.1	1951	630.3	15
	7810-00	SAN JACINTO JOHANSEN	33-47-15	116-58-06	04S/01W-5	468	1886	1978	663.4	1941	114.0	1961	318.4	86
Y-02.C1	7811-00	SAN JACINTO RES MWD	33-47-45	116-59-55	04S/01W-5	457	1948	1974	642.8	1958	92.4	1961	277.1	26
	7813-00	SAN JACINTO RS-RRNG	33-47-12	116-57-32	04S/01W-5	475	1948	1980	642.8	1978	98.3	1970	300.6	14
	8261-11	SIMS RANCH MWD	33-47-50	116-52-22	04S/01E-5	640	1938	1962	683.5	1958	133.3	1959	377.9	24
	9586-00	WEST PORTAL	33-49-16	116-57-59	04S/01W-5	460	1963	1976	405.7	1976	244.4	1964	304.0	7
Y-02.C2	9660-05	WHITTIER GROVE-LHWC	33-45-55	116-53-50	05S/01E-5	536	1927	1939	808.0	1937	178.1	1934	402.1	11
	3898-70	HEMET LAKE - L.H.M.W.D.	33-40-05	116-46-10	06S/03E-5	1326	1897	1971	877.1	1937	124.2	1961	477.8	74
	4181-00	MURKEY CREEK PARK	33-40-47	116-40-47	06S/03E-5	1338	1962	1978	836.5	1978	218.3	1972	468.9	17
	2805-00	ELSINORE - CDF FIRE STA	33-40-10	117-19-55	06S/04W-5	392	1897	1980	665.0	1906	105.1	1961	309.2	79
Y-02.C3	2805-50	ELSINORE STATE PARK	33-40-32	117-22-21	06S/05W-5	386	1966	1978	726.7	1969	208.1	1970	344.7	11
	2811-00	ELSINORE (NEAR) 145E-ALBRIGHT	33-38-00	117-16-00	06S/04W-5	442	1948	1957	432.8	1952	124.4	1951	218.6	8
	2812-00	ELSINORE 4 SSE	33-37-08	117-18-37	06S/05W-5	398	1937	1965	617.3	1958	132.9	1961	295.5	7
	2812-50	ELSINORE STATE PK + REC A	33-40-32	117-22-21	06S/05W-5	386	1966	1975	726.7	1969	208.1	1970	349.3	9
Y-05.F2	4686-51	LAKELAND VILLAGE	33-38-13	117-20-44	06S/05W-5	402	1956	1978	801.9	1969	125.8	1961	355.3	22
	8163-81	SHERMAN (ELSINORE)	33-41-00	117-23-00	05S/05W-5	396	1917	1952	914.8	1941	216.7	1951	425.1	31
	7306-36	REDLANDS FUNK	34-01-56	117-11-25	02S/03W-5	467	1975	1976	345.6	1976	254.0	1975	299.8	2
	4300-60	IRVINE MORD CANYON	33-33-20	117-49-18	07S/09W-5	30	1900	1944						
Z-01.A2	4647-00	LAGUNA BEACH-SEWAGE DIS P	33-32-48	117-46-50	07S/09W-5	11	1929	1980	739.7	1941	102.8	1961	316.1	52
Z-01.A3	4647-01	LAGUNA BEACH HARDWARE	33-32-33	117-46-55	07S/09W-5	9	1927	1978	745.7	1941	111.9	1961	313.5	52
	4650-00	LAGUNA BEACH 2-L.B.WAT DI	33-33-03	117-48-01	07S/09W-5	64	1948	1978	629.9	1978	133.7	1951	278.4	11
	2821-11	EL TORO-MOULTON RANCH	33-36-26	117-42-07	06S/08W-5	114	1877	1971	829.3	1884	117.3	1961	354.9	95
Z-01.B0	2821-30	EL TORO LOS ALISOS RM	33-39-50	117-40-05	06S/08W-5	207	1929	1977	3800.3	1957	125.3	1961	450.0	43
	0114-51	ALISO CANYON COOK	33-41-05	117-37-10	06S/07W-5	354	1945	1974	887.6	1969	201.3	1959	431.5	25
	2711-70	EL CARISO GUARD STATION	33-39-00	117-24-43	06S/05W-5	811	1966	1978	1067.3	1969	352.1	1977	579.5	9
	3939-60	HICKET CANYON JOPLIN	33-40-43	117-34-23	06S/07W-5	524	1966	1978	1092.9	1969	276.3	1977	556.6	10
Z-01.C0	4057-10	HOLY JIM CANYON	33-41-00	117-30-54	06S/06W-5	585	1955	1961	659.2	1956	309.3	1961	481.3	6
	5880-50	MOULTON MIGUEL	33-34-41	117-40-23	07S/08W-5	91	1970	1978	777.0	1978	190.1	1972	358.3	8
	7495-50	ROBINSON RANCH	33-39-46	117-33-43	08S/07W-5	366	1926	1967	920.9	1941	170.6	1961	462.8	42
	7836-51	SAN JUAN CAPISTRANO-HANKE	33-30-45	117-38-16	08S/07W-5	46	1905	1978	799.3	1922	122.4	1961	367.5	73
Z-01.C1	7836-52	SAN JUAN CAPISTRANO-SOGE	33-30-44	117-39-58	08S/08W-5	49	1924	1975	706.9	1941	116.6	1961	343.4	52
	7837-00	SAN JUAN GUARD STA. -RRNG	33-35-30	117-30-47	07S/06W-5	223	1948	1978	872.9	1978	97.3	1961	339.8	19
	7993-00	SANTIAGO PEAK	33-42-39	117-31-59	05S/06W-5	1718	1950	1979	1454.0	1969	289.2	1961	735.0	30
	8992-00	TRABUCO CANYON -RRNG	33-39-26	117-35-22	06S/07W-5	296	1940	1978	939.6	1941	167.8	1961	409.3	36
Z-01.C2	8992-01	TRABUCO CANYON	33-39-28	117-34-12	08S/08W-5	381	1965	1968	563.6	1967	509.1	1966	536.4	2
	1507-50	CAPISTRANO BEACH RD YARD	33-28-03	117-41-02	08S/08W-5	6	1956	1979	4759.8	1967	105.1	1961	486.1	23
	0622-51	PALISADES RES-SAN CLEMENTE	33-27-46	117-39-02	08S/07W-5	110	1966	1978	654.3	1978	172.8	1972	313.2	12
	7729-00	SAN CLEMENTE - FIRE STA	33-25-40	117-36-52	08S/07W-5	41	1931	1946	664.7	1941	207.1	1934	371.4	13
Z-01.D0	7711-20	SAN CLEMENTE POLICE	33-25-30	117-36-31	08S/07W-5	79	1931	1976	689.3	1941	98.3	1961	307.0	44
	7866-20	SAN MATEO CR-CAMP PENOLET	33-28-15	117-28-30	08S/06W-5	128	1957	1973	807.2	1969	137.4	1961	379.5	11
	1557-79	CASE SPRING-CAMP PENOLET	33-26-40	117-24-55	08S/05W-5	721	1967	1975	1028.2	1969	236.3	1972	534.5	8
	7871-35	SAN ONOFRE-SOGE+CSE-RRNG	33-22-00	117-33-00	09S/06W-5	24	1967	1973	380.9	1969	129.0	1972	226.7	7
Z-02.A1	6377-11	OCEANSIDE-CAMP PENOLET	33-12-40	117-23-55	11S/05W-5	18	1953	1973	310.5					

TABLE 8. PRECIPITATION STATIONS BY AREAL CODE (continued)

TABLE 8. PRECIPITATION STATIONS BY AREAL CODE (CONTINUED)															
AREAL CODE	STATION NUMBER	STATION NAME	LATITUDE	LONGITUDE	TOWNSHIP & RANGE	ELEVATION	RECORD		MAXIMUM PRECIPITATION		MINIMUM PRECIPITATION		MEAN ANNUAL	YEARS IN RECORD	
							YEAR BEGIN	YEAR END	MAX ANNUAL	YEAR OCCUR	MIN ANNUAL	YEAR OCCUR			
Z-02.C1	9675-65	WILDOMAR - BROWN	33-35-32	117-16-09	075/04W-5	377	1914	1976	758.9	1969	132.1	1951	339.3	61	
Z-02.C2	9675-61	WILDOMAR (NEAR)	33-36-40	117-15-50	065/04W-5	393	1975		327.6	1975					
	9341-70	MURRIETA DWR FIELD OFF	33-33-17	117-12-13	075/03W-5	338	1952	1954	250.4	1953					
	9342-00	MURRIETA SCS OFFICE	33-33-48	117-13-21	075/03W-5	345	1954	1979	825.0	1978	77.0	1961	315.4	22	
	7969-21	SANTA ROSA RCH GATE	33-33-07	117-14-05	075/03W-5	378	1924	1938	769.7	1927	215.6	1924	414.8	14	
	8843-01	TERECULA COF FIRE STATION	33-29-48	117-08-57	085/03W-5	311	1902	1978	831.2	1969	125.0	1961	388.0	39	
	8844-00	TERECULA	33-30-00	117-09-00		311	1973	1978	358.1	1977	345.4	1974	351.8	2	
	9675-75	WILDOMAR	33-35-31	117-15-35	075/04W-5	381	1975	1978	327.6	1975	294.0	1977	310.8	2	
Z-02.C3	7736-50	SAN DIEGO CANAL COTTAGE	33-36-00	117-04-44	065/02W-5	445	1962	1973	509.1	1969	196.5	1964	276.8	10	
Z-02.D1	3624-10	GREENWOOD - AULD VALLEY	33-34-00	117-04-35	075/02W-5	427	1912	1926	606.7	1922	168.7	1913	289.2	10	
	4711-40	LAKE SKINNER	33-34-55	117-04-41	075/02W-5	456	1974								
	8272-30	SKINNER LAKE	33-35-10	117-04-30	075/02W-5	454	1962	1978	509.1	1969	196.5	1964	283.7	15	
Z-02.D2	6043-00	MURRIETA HOT SPRINGS	33-33-30	117-09-10	075/03W-5	366	1946	1950	251.8	1949	157.2	1947	198.8	3	
Z-02.D4	7640-40	SAGE - U.S.C.E.	33-35-00	116-55-55	075/01W-5	696	1939	1954	773.5	1941	201.3	1951	371.9	14	
	7640-50	SAGE COF FIRE STATION	33-34-54	116-55-55	075/01W-5	698	1963	1978	485.7	1969	226.4	1970	319.6	14	
Z-02.E1	6759-66	PAUBA RANCH	33-28-45	117-05-50	085/02W-5	323	1920	1973	760.2	1937	95.1	1961	355.1	53	
Z-02.E2	7222-05	RAINBOW COTTAGE RWD	33-28-57	117-07-52	085/02W-5	396	1958	1978	815.0	1969	164.8	1961	404.9	20	
Z-02.E2	1265-00	CAMUILLA COAHUILA SCHOOL	33-32-30	116-44-36	075/02E-5	1108	1911	1919	697.2	1915	178.9	1913	432.5	7	
	6035-00	MURCELL RANCH COAHUILA VA	33-32-00	116-46-00	075/02E-5	1129	1943	1957	368.9	1947	228.1	1956	287.6	5	
	9026-01	TRIPP FLATS - ADOBE RANCH	33-35-45	116-44-54	075/02E-5	1189	1949	1959	803.5	1958	236.0	1949	402.7	10	
Z-02.G3	0235-00	ANZA COF STATION	33-33-18	116-40-22	675/16E-5	1195	1943	1980	773.1	1980	120.6	1961	339.8	38	
Z-02.H1	9213-08	VAIL RES-PAUBA RCH SAGE E	33-29-00	116-57-35	085/01W-5	442	1921	1957	842.3	1941	100.7	1934	288.4	37	
	9213-11	VAIL LAKE USGS	33-29-44	116-58-33	085/01W-5	411	1952	1977	487.7	1969	81.3	1964	241.8	18	
Z-02.H2	1031-00	BRAEFORD RANCH AGUANGA	33-29-12	116-48-10	085/02E-5	1030	1959	1963	294.3	1960	193.7	1961	225.3	3	
Z-02.H3	5657-00	PALOMAR MTH OBSERVATORY	33-21-21	116-51-40	095/01E-5	1690	1942	1980	1567.6	1978	253.9	1961	707.1	38	
Z-02.H4	0046-00	AGUANGA BERGMAN RCH	33-29-42	116-49-12	085/02E-5	960	1928	1949	651.3	1941	138.6	1934	335.4	20	
	0046-01	AGUANGA THOMSEN	33-26-09	116-51-40	085/01E-5	605	1909	1928	586.2	1916	163.4	1925	347.1	19	
Z-02.U3	6319-00	OAK GROVE-USFS RANGER STA	33-23-15	116-47-30	095/02E-5	838	1910	1980	776.0	1941	249.6	1948	501.6	11	
Z-03.A1	6376-03	OCEANSIDE (31)-S.O.G.-E.	33-11-45	117-22-53	115/05W-5	18	1937	1957	638.7	1941	167.4	1948	314.8	20	
	6376-07	OCEANSIDE (21)CITY M-BRODIE	33-11-40	117-22-40	115/05W-5	20	1910	1919	562.0	1915	164.8	1913	340.3	9	
	6377-03	OCEANSIDE-CITY FIRE DEPT	33-11-53	117-22-38	115/05W-5	26	1962	1980	624.0	1978	221.7	1974	367.1	8	
	6379-00	OCEANSIDE PUMP PLANT-RRMG	33-12-36	117-21-10	115/05W-5	9	1952	1978	532.2	1958	93.4	1961	238.8	19	
Z-03.A2	2958-00	FALLBROOK-D.S.-F.C. -RRMG	33-21-53	117-14-55	095/04W-5	201	1970	1978	965.1	1978	226.0	1970	410.2	8	
	2959-05	FALLBROOK - S.C.S. -RRMG	33-20-58	117-14-37	095/03W-5	165	1940	1965	775.1	1941	137.0	1961	337.4	25	
	9228-00	VALLEY CTR (3ME)IYERS	33-15-32	117-01-26	105/01W-5	492	1942	1964	842.3	1952	138.6	1961	384.1	22	
	9228-01	VALLEY CENTER 8N-JOHNSON	33-17-35	117-01-55	105/01W-5	511	1964	1969	508.1	1967	320.8	1968	412.4	4	
Z-03.A6	9228-06	VALLEY CTR (31)31-LAKE RM	33-14-40	117-00-00	115/01W-5	472	1924	1943	970.5	1941	267.7	1934	542.7	18	
	9232-00	VALLEY CENTER 2 NNE-RWD	33-13-55	117-01-05	115/01W-5	424	1969	1977	528.7	1973	226.4	1972	363.1	6	
Z-03.B1	7222-03	RAINBOW CONSERVATION CAMP	33-25-40	117-07-00	095/02W-5	471	1950	1969	774.8	1958	184.9	1961	443.2	15	
Z-03.B2	2864-00	ESCONDIDO INTAKE-OTM HD 3	33-16-00	116-53-28	105/01E-5	539	1934	1968	1060.0	1941	187.0	1961	555.5	31	
Z-03.B3	3170-00	AMAGO-LA JOLLA INDIAN RES	33-16-50	116-51-40	105/01E-5	828	1937	1944	1144.8	1937	476.1	1940	790.5	7	
	6128-01	NELLIE/PALOMAR MTH-BAILEY	33-19-10	116-52-10	105/01E-5	1631	1902	1923	2017.3	1906	767.1	1918	1293.8	16	
	3914-00	HENSHAW DAM (2)	33-14-15	116-45-37	115/02E-5	823	1912	1940	1331.5	1980	211.1	1961	673.2	69	
	7162-01	PUERTA LA CRUZ-VISTA I.O.	33-19-00	116-41-00	105/03E-5	899	1966	1973	670.0	1969	227.4	1972	405.0	7	
Z-03.C1	7244-00	RANCHITA - GOVERNMENT SPR	33-13-35	116-31-45	115/04E-5	1253	1942	1973	610.6	1958	99.6	1967	323.5	27	
	8196-50	SHOP	33-17-00	116-42-00		847	1967	1973	586.4	1969	198.9	1972	356.7	7	
	8824-50	TEM FOOT WEIR	33-17-00	116-45-00		953	1967	1973	882.3	1969	306.1	1972	526.8	7	
	9379-21	VISTA I.O.- SHOP	33-16-30	116-41-30	105/03E-5	847	1966	1969	455.5	1967	216.9	1968	336.2	2	
	9379-27	VISTA I.O.- 10 FT WEIR	33-16-30	116-44-30	105/02E-5	853	1966	1969	360.9	1968					
	9379-31	VISTA I.O.- V-MOTCH	33-13-30	116-43-30	115/02E-5	829	1966	1969	302.8	1968					
	9379-39	VISTA I.O.- WEST FORK	33-17-15	116-44-30	105/02E-5	953	1966	1969	397.3	1968					
	9447-00	WARNER SPRINGS-HOT SPRING	33-17-05	116-37-52	105/03E-5	969	1907	1977	945.6	1922	93.1	1961	414.3	69	
	9447-05	WARNER SPRINGS-RANCH HOUSE	33-17-01	116-38-15	105/03E-5	963	1907	1920	706.2	1915	311.8	1918	456.5	14	
	9447-10	WARNER SPRINGS-COF FIRE S	33-16-25	116-38-40	105/03E-5	930	1975		413.9	1975					
	9444-01	WARNER RANCH HOUSE -SDCWC	33-14-29	116-39-45	115/03E-5	882	1971	1975	550.4	1973	389.6	1975	470.0	2	
	9558-00	WEST FORK	33-17-00	116-45-00		853	1966	1973	1163.2	1969	325.2	1972	630.1	8	
Z-03.C2	5151-81	LOST VALLEY-BOY SCOUT CAM	33-21-00	116-34-00	095/04E-5	1402	1967	1973	599.0	1973	136.7	1972	379.4	5	
Z-04.A0	7857-03	SAN LUIS REY - S.O.G.-E.	33-12-43	117-19-58	115/04W-5	62	1952	1969	550.5	1958	98.5	1961	265.3	16	
Z-04.B2	2840-01	E RESERVOIR - VISTA I.O.	33-12-43	117-12-06	115/03W-5	229	1965	1973	453.3	1973	260.1	1968	359.2	4	
	9377-00	VISTA 15W (2) - BRINK	33-11-25	117-15-20	115/04W-5	101	1938	1946	710.7	1941	376.3	1940	461.4	6	
	9378-00	VISTA 2 NNE	33-13-45	117-13-30	115/03W-5	155	1967	1980	666.7	1980	177.8	1972	350.9	11	
	9379-00	VISTA 1W - C OF C	33-12-00	117-15-30	115/04W-5	122	1958	1961	166.7	1960	170.6	1959	268.7	2	
	9379-10	VISTA - CO ROAD STA -RRMG	33-13-35	117-13-10	115/03W-5	162	1968	1969	217.6	1968					
	9379-23	VISTA - GREEN	33-12-10	117-14-15	115/03W-5	111	1966	1967	426.5	1967					
	9379-42	VISTA - S.O.G.-E (FLETCHER)	33-12-07	117-14-00	115/03W-5	110	1966	1969	304.6	1968	254.5	1969	279.6	2	
	9379-00	VISTA-PRESS - RENSBURG	33-12-15	117-14-00	115/03W-5	110	1931	1973	720.2	1941	123.0	1961	342.4	42	
	6656-00	PALOMAR AIRPORT	33-07-00	117-16-00			1966	1975	402.3	1969	141.0	1972	287.4	9	
	4705-50	LAKE SAN MARCUS	33-07-30	117-12-36			1967	1973	396.2	1969	174.3	1972	299.9	7	
Z-04.E3	7859-33	SAN MARCOS-CO RD STA-RRMG	33-08-55	117-11-50	125/03W										

TABLE 8. PRECIPITATION STATIONS BY AREAL CODE (continued)

AREAL CODE	DWR STATION NUMBER	STATION NAME	ALTITUDE FEET MSL	LONGITUDE DEG MIN SEC	TOWNSHIP & RANGE	ELEVATION FEET MSL	RECORD		MAXIMUM PRECIPITATION		MINIMUM PRECIPITATION		MEAN ANNUAL	RANGE IN INCHES
							YEAR BEGIN	YEAR END	MAX ANNUAL	YEAR OCCUR	MIN ANNUAL	YEAR OCCUR		
Z-05.01	7231-00	RAMONA - SPAULDING	33-04-41	116-50-33	135/01E-S	451	1957	1973	671.7	1958	18.0	1968	356.9	15
Z-05.01	7348-00	VINEYARD RANCH - BRNG	33-09-45	116-54-00	125/01E-S	622	1966	1975	708.1	1969	267.2	1973	424.8	8
Z-05.03	5557-01	MESA GRANDE - DAVIS	33-10-15	116-45-10	115/02E-S	1021	1909	1922	1228.3	1916	496.6	1918	799.5	14
	8707-01	SUTHERLAND DAM - SODU	33-07-06	116-47-15	125/02E-S	640	1914	1975	953.7	1915	241.2	1961	524.5	19
Z-06.80	8707-02	SUTHERLAND DAM-SPRING HILL	33-05-45	116-47-13	125/02E-S	774	1975	1976	583.3	1976				
	7110-10	POMAY CO RD STA	32-57-00	117-03-45			1966	1975	369.9	1966	164.8	1968	274.6	9
	7110-13	POMAY-MENSHAW	32-57-52	117-03-35			1966	1975	408.7	1966	156.2	1972	266.2	6
	7111-00	POMAY VALLEY	32-57-00	117-04-00	145/02W-S	134	1879	1960	746.2	1884	113.5	1958	338.1	42
Z-06.03	4662-10	LA JOLLA	32-51-00	117-16-00		61	1966	1973	365.7	1966	144.7	1972	252.9	8
Z-06.00	5707-01	MIRAMAR	32-54-00	117-06-00	155/02W-S	201	1901	1976	763.9	1941	160.3	1934	349.9	53
	9151-50	UNIVERSITY CTY STELL	32-51-10	117-12-30			1966	1969	312.0	1967				
Z-06.00	5718-00	MISSION BEACH	32-46-00	117-15-00		6	1957	1958						
Z-07.41	2074-00	COUNTY OPER CENTER-SO-SRG	32-50-00	117-07-35	155/02W-S	130	1968		202.5	1968				
	4493-50	KEANEY MESA Z-SO CO BRNG	32-50-00	117-07-35	155/02W-S	130	1966	1973	418.9	1967	175.2	1972	298.0	8
	4736-00	LA MESA 1 ME	32-47-00	117-00-00	165/01W-S	201	1957	1958						
	4952-80	LINDA VISTA-RIEDY	32-46-15	117-10-10			1966	1969	300.4	1967	193.4	1968	246.9	2
Z-07.41	5719-40	MISSION SUB STA SOGE	32-47-30	117-06-15			1966	1969	339.9	1967	197.1	1968	268.5	2
	5809-41	MONTGOMERY FIELD	32-48-55	117-08-30	165/03W-S	107	1966	1973	416.3	1969	176.0	1972	289.1	8
	5039-31	MURRAY DAM	32-46-51	117-02-38	165/02W-S	158	1915	1978	704.4	1978	0.0	1928	289.6	62
	7740-03	SAN DIEGO STATE UNIV-GEO	32-46-34	117-04-23		140	1958	1980	610.4	1978	129.1	1961	295.7	22
Z-07.42	4710-00	LAKEVIEW Z E	32-51-00	116-53-00	155/01E-S	211	1967	1980	749.9	1978	212.1	1970	413.7	14
	4711-00	LAKEVIEW Z ME	32-52-00	116-54-00	155/01E-S	137	1957	1967	619.4	1958	199.9	1961	327.9	8
	7887-50	SAN VICENTE DAM	32-54-00	116-55-00		244	1970	1972	351.8	1971	211.8	1972	262.3	3
	2702-00	EL CAJON-SOGE EAST OPR CM	32-47-45	116-58-15	165/01W-S	140	1965	1973	405.4	1966	192.4	1973	298.8	5
Z-07.43	2705-00	EL CAJON Z E	32-47-00	116-55-00	165/01E-S	160	1876	1920	638.5	1916	145.0	1904	351.8	22
	3410-00	GILLESPIE FIELD	32-49-00	116-58-00		113	1960	1979	560.3	1978	138.4	1961	270.2	17
	6777-25	PEERLESS-ASPS	32-50-00	116-57-00			1966	1969	412.2	1969	214.4	1968	330.1	3
	7245-50	RANCHO ARBOLEDA	32-49-00	116-55-00		244	1966	1973	436.9	1967	191.6	1972	322.3	7
Z-07.44	0889-00	BLOSSOM VALLEY	32-52-00	116-51-00		274	1966	1975	474.0	1969	190.1	1966	341.1	8
Z-07.81	3000-00	FELDMAN SPG CO PARK	32-50-50	116-51-30			1966	1973	468.5	1969	190.4	1972	317.9	8
Z-07.81	7949-00	SAN VICENTE RES	32-55-00	116-45-00	145/01E-S	201	1943	1976	688.2	1975	178.3	1961	367.2	29
	2709-00	EL CAPITAN DAM	32-53-00	116-49-00	155/02E-S	153	1937	1990	729.8	1978	174.2	1959	405.2	43
Z-07.03	0136-00	ALPINE	32-50-00	116-46-00		530	1960	1980	508.6	1978	163.4	1961	413.6	19
Z-07.01	4415-00	JULIAN-NEARBY-MANZANITA RM	33-04-00	116-37-00	135/03E-S	1214	1921	1949	1299.8	1937	339.6	1934	788.3	29
Z-07.02	4412-00	JULIAN - COLEMAN	33-04-00	116-36-35	135/04E-S	1285	1880	1952	1762.7	1884	196.4	1951	818.7	25
	4418-00	JULIAN (WYOMING)-VILTRK	33-05-34	116-38-45	125/03E-S	1114	1950	1980	1242.0	1980	301.4	1961	652.3	31
Z-07.03	2239-00	CUYAMACA - HELIX 1-0	32-59-20	116-39-15	145/04E-S	1417	1888	1980	3103.7	1909	308.2	1961	973.0	93
Z-08.40	1252-00	DARRFIELD NAT MON	32-40-00	117-15-00		149	1957	1968	364.9	1958	89.2	1961	209.7	8
Z-08.81	7017-00	POINT LOMA NAVY F LA	32-43-00	117-14-45	175/04W-S	92	1931	1943	614.7	1941	132.2	1934	343.6	11
	7740-00	SAN DIEGO MNS-LINDSBERG F	32-43-59	117-10-32	165/03W-S	4	1850	1960	661.4	1884	87.4	1961	250.9	230
Z-08.82	1747-00	CHOLLAS RESERVOIR	32-44-00	117-03-00	165/02W-S	122	1965	1975	361.0	1973	142.7	1972	253.9	6
	4735-00	LA MESA	32-46-00	117-01-00	165/01W-S	161	1934	1960	693.7	1941	71.7	1968	329.0	46
Z-08.02	6088-01	NATIONAL CITY	32-40-04	117-06-42		5	1965	1973	337.0	1973	109.5	1972	219.6	6
Z-09.41	1758-20	CHULA VISTA FIRE DEPT	32-38-25	117-05-10	185/02W-S	18	1967	1975	284.7	1969	108.1	1972	209.0	8
Z-09.42	1758-40	CHULA VISTA S O GWE	32-38-15	117-05-15			1966	1969	265.5	1967	264.2	1968	264.9	2
	5233-00	LYNNWOOD HILLS	32-38-36	117-07-00			1966	1969	291.7	1967	160.0	1968	225.9	2
	0944-00	BONITA	32-44-00	117-02-00	175/02W-S	32	1916	1971	663.4	1941	112.2	1934	283.1	54
	2906-50	EUCALYPTUS COUNTY PK	32-45-35	117-00-00			1966	1975	444.0	1969	173.6	1972	316.8	7
Z-09.81	4491-00	LEMON GROVE FIRE DEP	32-44-15	117-01-45			1966	1975	374.9	1967	300.6	1968	347.1	4
	8450-40	SPRING VALLEY RD	32-44-10	117-00-30			1966	1969	412.0	1969	255.6	1968	344.7	3
	3255-00	FRUITBLOSSOM ACRES	32-45-00	116-54-00			1966	1969	405.7	1969	279.6	1968	357.1	3
	4725-01	SWEETWATER DAM	32-41-00	117-00-30	175/01W-S	91	1965	1973	352.0	1967	142.1	1972	265.9	8
Z-09.01	4547-51	LAKE LOVELAND	32-46-52	116-47-38	165/02E-S	427	1966	1967	538.8	1967				
	5144-00	LOVELAND DAM	32-46-52	116-47-45	165/02E-S	427	1965	1975	524.8	1969	333.1	1968	442.2	3
	2403-40	DESCANSO - ELLIS	32-10-30	116-36-40	155/04E-S	1036	1896	1916	729.7	1915	291.8	1934	571.6	11
	2404-00	DESCANSO RANGER STA-USFS	32-51-20	116-37-20	155/03E-S	1067	1960	1980	1170.0	1980	173.1	1968	585.8	21
Z-10.40	2040-20	CORDONADO-PURCELL	32-41-30	117-10-00	175/03W-S	8	1973		295.9	1973				
Z-10.60	4734-00	CHULA VISTA	32-35-00	117-06-00		3	1919	1980	408.5	1922	21.3	1968	231.0	33
	4232-00	IMPERIAL BEACH MIA S.	32-34-00	117-07-00		8	1967	1973	279.0	1967	76.3	1972	206.1	5
	5162-00	LOWER STAY RESERVOIR	32-35-30	116-55-38	185/01W-S	152	1906	1978	554.7	1927	105.9	1934	289.2	71
Z-10.01	9142-10	UPPER STAY RES-S.O.U.A.D.	32-38-54	116-55-58	175/01W-S	168	1926	1976	698.1	1941	125.5	1961	314.1	32
Z-10.03	4735-01	JAMUL	32-43-00	116-53-00	175/01E-S	317	1975							
Z-11.41	7281-00	REAM FIELD NAS	32-34-00	117-07-00			1966	1969	219.3	1969				
Z-11.42	1115-15	BROWN FIELD	32-34-00	116-59-00		137	1975	1978	277.1	1976	267.2	1977	272.2	2
Z-11.83	7528-40	ADRIQUEZ DAM-BAJA CALIF	32-27-00	116-54-00		130	1969	1978	346.7	1973	95.8	1972	209.1	8
	8929-10	TIJUANA-HYD RES-BAJA CAL	32-31-00	117-02-00		55	61	1977	352.3	1966	66.1	1972	230.2	13
	5136-01	MARION VALLEY	32-14-03	116-46-40	185/02E-S	168	1961	1978	509.6	1967	184.2	1972	329.0	10
	0513-50	BARRETT CAMP	32-40-00	116-40-30	175/03W-S	509	1975		292.0	1975				
Z-11.01	0514-00	BARRETT DAM - SODU	32-40-00	116-40-15	175/03E-S	495	1914	1950	924.6	1915	172.6	1961	449.4	65
	5911-40	PINE VALLEY-NEILLAND	32-40-00	116-31-10	155/04E-S	1154	1967	1975	772.3	1973	269.0	1972	524.0	8
	5440-00	MORENA DAM (NR) - SODU	32-41-10	116-31-20	155/03E-S	439	1921	1978	1119.6	1927	136.4	1961	498.1	56
	4012-40</													

APPENDIX B

SOUTH COAST REGION

1. Wind stations, South Coast Region, whose data are available from the National Climatic Data Center. State wide index is presented in Appendix D.
2. Index of South Coast Air Quality Management District wind gages (*) indicates coastal station. Period of record indicates period of record on computer files. In general, those ending in 1975 were continued, but are available on hardcopy only.
3. Precipitation gages, Los Angeles County. From the Department of Public Works, Los Angeles County.
4. Typical Precipitation Data Sheets, Los Angeles County Department of Public Works. Courtesy of Don Carpenter. (Includes typical chart from recording gages)
5. Index of precipitation gages, Riverside County, with cross-reference and location maps. Courtesy of Kathy Carter, Riverside County Flood Control and Water Conservation District.
6. Index of precipitation gages, San Bernardino County, with location map. Courtesy of Art Luther, San Bernardino County Flood Control and Water Conservation District. (Followed by typical data sheets)
7. Index of precipitation gages, Orange County, with location map. Courtesy of Emmett Franklin, Orange County Environmental Management Agency.
8. Typical Data sheets, Orange County Environmental Management Agency.
9. Index of precipitation gages, South Coast Region. From the California Department of Water Resources, Bulletin 230-81

1. Wind stations, South Coast Region whose data are available from the National Climatic Data Center. State wide index is presented in Appendix D.

LOCATION	AGENCY NUMBER	LATITUDE	LONGITUDE	HOURLY START	RECORD STOP	OBS/ DAY	DIGITIZED RECORD
Euma Beach	CG	34-01	118-49	1976		3	-
Santa Monica	CG	34-00	118-30	1977		3	-
Santa Monica	LAWR 93197	34-01	118-27	1961		6	-
Marina Del Rey	CG	33-58	118-27	1975		3	-
Los Angeles Airport	SAWR 23174 WBAS WBO	33-56	118-23	1930 1938	1937	3-5 24	1942 -
Hermosa Beach	CG	33-52	118-24	1976		4	-
Pl. Vicente	CG	33-45	118-25	1971		5	-
San Pedro Beach	CG	33-43	118-17	1973		3	-
St. Fermin	HF 92122	33-43	118-17	1938	1245	5	-
San Pedro	NAS 93113	33-45	118-15	1938	1947	24	-
San Pedro	WBO	33-44	118-17	1937	1960	Charts	-
San Pedro	WBO	33-45	118-16	1976		3	-
Los Angeles	CG	33-43	118-15	1969	1971	5	-
Los Alamitos	NAS 93106	33-48	118-04	1943	1970	24	1950 - 1951
Huntington Beach	CG	33-39	118-00	1975		3	-
Newport Beach	CG	33-36	117-53	1975		5	-
Orange Beach	A	33-24	117-46	1979	1976	24	-

2. Index of South Coast Air Quality Management District wind gages, (*) indicates coastal station. Period of record indicates period of record on computer files. In general, those ending in 1975 were continued, but are available on hardcopy only.

LINE	FROM	TO	CLASS	FARE	TAX	FEES	TOTAL	STATUS
1	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
2	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
3	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
4	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
5	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
6	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
7	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
8	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
9	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
10	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
11	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
12	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
13	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
14	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
15	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
16	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
17	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
18	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
19	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
20	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
21	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
22	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
23	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
24	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
25	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
26	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
27	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
28	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
29	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
30	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
31	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
32	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
33	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
34	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
35	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
36	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
37	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
38	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
39	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
40	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
41	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
42	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
43	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
44	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
45	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
46	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
47	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
48	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
49	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
50	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
51	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
52	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
53	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
54	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
55	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
56	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
57	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
58	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
59	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
60	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
61	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
62	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
63	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
64	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
65	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
66	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
67	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
68	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
69	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
70	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
71	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
72	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
73	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
74	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
75	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
76	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
77	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
78	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
79	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
80	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
81	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
82	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
83	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
84	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
85	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
86	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
87	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
88	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
89	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
90	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
91	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
92	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
93	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
94	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
95	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
96	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
97	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
98	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
99	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	
100	MEMPHIS	MEMPHIS	Y	0.00	0.00	0.00	0.00	

STATION ID	STATION NAME	STATION TYPE	UTM (EAST-KM)	UTM (NORTH-KM)	PERIOD OF RECORD
056A	ALTAMIR	ALT	110. 7. 55.	34. 12. 10.	1/56-12/62
056B	ALTAMIR	ALT	110. 6. 0.	34. 10. 45.	NONE
056C	LA CANADA	LA	110. 11. 10.	34. 13. 50.	NONE
056D	PASADENA	PAS	110. 6. 50.	34. 6. 50.	NONE
056E	PASADENA	PAS	-----	-----	9/55-6/59
056F	PASADENA	PAS	-----	-----	1/56-10/61
056G	PASADENA	PAS	-----	-----	NONE
056H	PASADENA	PAS	-----	-----	NONE
056I	PASADENA	PAS	-----	-----	1/56-3/59
056J	PASADENA	PAS	-----	-----	NONE
056K	PASADENA	PAS	-----	-----	8/55-3/62
056L	PASADENA	PAS	-----	-----	1/56-12/61
056M	PASADENA	PAS	-----	-----	NONE
056N	PASADENA	PAS	-----	-----	1/56-12/75
056O	PASADENA	PAS	-----	-----	1/56-10/60; 7/76-12/81
056P	PASADENA	PAS	-----	-----	5/60-2/64; 5/67-1/72
056Q	PASADENA	PAS	-----	-----	NONE
056R	PASADENA	PAS	-----	-----	1/56-12/72
056S	PASADENA	PAS	-----	-----	1/56-12/76
056T	PASADENA	PAS	-----	-----	2/56-8/61
056U	PASADENA	PAS	-----	-----	1/56-12/59
056V	PASADENA	PAS	-----	-----	8/55-6/56
056W	PASADENA	PAS	-----	-----	1/58-12/75
056X	PASADENA	PAS	-----	-----	4/62-10/62
056Y	PASADENA	PAS	-----	-----	NONE
056Z	PASADENA	PAS	-----	-----	3/61-10/62
057A	LOS ANGELES	LOS	110. 13. 31.	34. 4. 2.	9/79-12/81
057B	LOS ANGELES	LOS	110. 14. 45.	34. 21. 5.	7/56-8/79
057C	LOS ANGELES	LOS	110. 16. 30.	34. 53. 30.	1/56-12/57; 7/76-12/81
057D	LOS ANGELES	LOS	110. 14. 14.	34. 59. 59.	1/57-12/60; 7/76-12/80
057E	LOS ANGELES	LOS	110. 14. 15.	34. 47. 20.	6/56-10/56
057F	LOS ANGELES	LOS	110. 24. 75.	34. 51. 40.	6/56-6/60
057G	LOS ANGELES	LOS	110. 14. 0.	34. 13. 45.	1/57-7/72
057H	LOS ANGELES	LOS	110. 6. 19.	34. 55. 16.	1/57-12/75
057I	LOS ANGELES	LOS	110. 4. 10.	34. 51. 20.	1/57-5/60
057J	LOS ANGELES	LOS	110. 51. 50.	34. 14. 20.	1/57-9/66
057K	LOS ANGELES	LOS	-----	-----	1/57-6/60
057L	LOS ANGELES	LOS	-----	-----	1/57-6/60
057M	LOS ANGELES	LOS	-----	-----	2/57-12/72
057N	LOS ANGELES	LOS	-----	-----	7/57-12/57
057O	LOS ANGELES	LOS	-----	-----	1/57-12/57
057P	LOS ANGELES	LOS	-----	-----	1/58-4/74
057Q	LOS ANGELES	LOS	-----	-----	1/58-5/64
057R	LOS ANGELES	LOS	-----	-----	3/56-8/71
057S	LOS ANGELES	LOS	-----	-----	NONE
057T	LOS ANGELES	LOS	-----	-----	NONE
057U	LOS ANGELES	LOS	-----	-----	10/58-5/75
057V	LOS ANGELES	LOS	-----	-----	5/59-12/76
057W	LOS ANGELES	LOS	-----	-----	NONE
057X	LOS ANGELES	LOS	-----	-----	3/60-12/76
057Y	LOS ANGELES	LOS	-----	-----	2/60-10/73
057Z	LOS ANGELES	LOS	-----	-----	8/60-12/75
058A	LOS ANGELES	LOS	-----	-----	3/62-12/76
058B	LOS ANGELES	LOS	-----	-----	1/63-12/75
058C	LOS ANGELES	LOS	-----	-----	1/63-12/75

STATION NAME LOCATION LONG (DEGREES) LAT (DEGREES) UTM(EASTING) UTM(NORTHING) PERIOD OF RECORD

1517	PEUL	RELANDS	117.	11.	16.	54.	3.	20.	462.8	3766.1	NONE
1520	YULI	YULI	117.	3.	15.	54.	3.	10.	495.0	3766.0	NONE
1536	YULI	VICTORVILLE	117.	17.	35.	54.	42.	5.	473.1	3821.5	NONE
1546	YULI	YULI	117.	1.	31.	54.	33.	45.	497.7	3861.3	NONE
1556	YULI	YULI	117.	15.	56.	54.	14.	50.	475.5	3789.4	NONE
1564	YULI	YULI	116.	54.	8.	54.	14.	51.	509.0	3789.4	NONE
1570	YULI	YULI	116.	3.	15.	54.	8.	25.	587.2	3778.2	NONE
1586	YULI	YULI	116.	23.	1.	54.	3.	6.	372.3	3766.6	NONE
1594	YULI	YULI	117.	26.	45.	54.	14.	45.	455.9	3796.7	NONE
1604	YULI	YULI	114.	57.	2.	54.	50.	8.	717.9	3857.2	NONE
1614	YULI	YULI	117.	9.	0.	54.	4.	0.	466.2	3769.4	NONE
1624	YULI	YULI	117.	41.	25.	54.	1.	10.	436.3	3764.3	NONE
1634	YULI	YULI	116.	14.	20.	54.	49.	50.	385.4	3743.2	NONE
1644	YULI	YULI	116.	53.	0.	54.	25.	0.	357.6	3609.5	NONE
1654	YULI	YULI	117.	42.	25.	54.	45.	34.	436.1	3957.3	NONE
1664	YULI	YULI	117.	24.	24.	54.	7.	23.	462.5	3776.0	NONE
1674	YULI	YULI	117.	54.	31.	54.	52.	54.	446.8	3749.0	NONE
1684	YULI	YULI	117.	54.	6.	54.	55.	25.	447.6	3753.6	NONE

3. Precipitation gages, Los Angeles County. From the Department
of Public Works, Los Angeles County.

RAINFALL STATION LOCATION AND SEASONAL AMOUNT

STA. NO.	STATION NAME	TYPE OF GAGE	YEARS OF RECORD	ELEV. OF GAGE	NORTH LAT.	WEST LONG.	OBSERVER	SEASONAL 1979-76	RAINFALL 1976-77
28	ESCONDIDO CANYON	S	91	1039	34-07-35	118-00-25	STEIN PETERSEN	9.08	12.04
30	SEMIWOLE HOT SPRINGS	S	90	925	34-06-25	118-07-10	JUNN L LINDA MCCOY	11.07	10.000
46	MALIBU LAKE	S	90	807	34-06-11	118-05-10	HENRY READ	10.09	15.10
98	CALABASAS	S	90	924	34-06-24	118-18-10	TON DARRIN	9.75	13.76
0	TOPANCA CANYON PATROL STATION	S	90	765	34-05-23	118-15-57	TOPANCA CYN PAT STA PERSONNEL	11.00	10.00
98	SEPUVEDA C RIVER	SP	40	429	34-13-32	118-28-04	GREEN ARROW MOUNTAIN PERS.	9.00	10.00
104	BEL AIR HOTEL	A	40	509	34-13-13	118-26-04	LACPCO PERSONNEL	9.03	10.00
110	UPPER FRANKLIN CANYON RESERVOIR	SPA	90	607	34-17-10	118-26-15	D.W.P. PERSONNEL	9.04	17.50
130	NORTH HOLLYWOOD-BLIZ	S	71	993	34-09-23	118-21-50	KATIE BLIZ	17.43	15.32
130	NORTH HOLLYWOOD-LAKESIDE	S	2	370	34-08-04	118-21-13	KATIE BLIZ	21.04	10.12
140	POSCOKE-HERRILL	SP	90	1059	34-16-19	118-21-32	E.D. PETERSEN	INC.	17.700
154	YAN MAYS	S	72	909	34-10-02	118-27-03	E.D. PETERSEN	9.00	13.17
17	SEPUVEDA CANYON AT PALMOLAND HIGHWAY	S	60	1025	34-07-31	118-20-26	PIRE STATION PERSONNEL	10.17	10.710
208	GIRARD RESERVOIR	S	50	964	34-09-07	118-16-34	D.W.P. PERSONNEL	9.20	13.22
218	WOLFOLO HILLS	S	65	874	34-10-14	117-15-33	LITTON (JAMES) CAMP PERSONNEL	9.13	13.00
230-E	CHATS WORTH RESERVOIR	SP AP	52	900	34-13-04	118-17-14	D.W.P. PERSONNEL	9.08	11.90
240	CHATS WORTH	S	40	900	34-13-02	118-16-30	MRS PAUL HEATON	9.00	10.00
250	NORTH RIDGE-L.A. DEPT. WED	S	57	1100	34-13-57	118-12-40	D.W.P. PERSONNEL	7.00	17.20
260	GRANADA HILLS	S	50	1230	34-13-00	118-13-50	MELBY STRATHMAN	9.00	13.70
260	STANNA	SP	50	1230	34-13-07	118-13-15	MRS FUSANO	11.02	15.70
31	ORCUTT RANCH	S	20	2050	34-10-28	118-16-16	STELLA BLESSING	10.26	10.65
320	NEWMALL-SOLEDAO DIV HOOTS	S AP	123	1263	34-23-07	118-11-54	PIRE STATION PERSONNEL	11.05	10.50
330-E	PACIFICA DAM	SA	92	1500	34-19-08	118-23-50	TOMAS JENETZ	10.25	10.710
390	SUNSET DEBRIS BASIN	S, R/L	60	1010	34-12-18	118-17-00	LACPCO PERSONNEL	10.07	17.200
420	RECONDO BEACH CITY HALL	S	60	70	33-50-03	118-17-00	E.D. PETERSEN	7.00	10.000
430	PALOS VERDES ESTATES	S	40	210	33-47-54	118-23-29	GEN AVENS	6.70	10.20
440	POINT VICENTE LIGHTHOUSE	S	90	124	33-44-37	118-24-30	PIRE STATION PERSONNEL	9.00	10.700
440-E	BIG TULUMCA DAM	SA	90	2715	34-17-07	118-11-14	JOHN FOSTER	20.00	17.00
470	CLEAR CREEK-CITY SCHOOL	SA	40	3150	34-16-25	118-13-12	CITY SCHOOL PERSONNEL	21.13	20.00
480	DAM HILDE	S	90	2170	34-16-37	118-11-07	U.S.P.S. PERSONNEL	19.20	13.75
570	LA CANADA-ARROYO SECO	S	60	1150	34-11-52	118-11-25	PIRE STATION PERSONNEL	15.43	17.12
580	WATERMAN GUARD STATION	S	47	3530	34-13-50	118-10-17	LACPCO PERSONNEL	24.98	20.70
590	COLONY	SA	60	3020	34-19-05	118-10-30	RONALD MILLER	22.44	19.00
590	LOUIS RANCH - ALDER CREEK	SA	61	4324	34-23-55	118-02-54	LACPCO PERSONNEL	19.1	19.00
590-E	CANYON HILL/LOUIS	SPA	60	4250	34-13-10	118-09-01	C. E. ROGERS	21.25	20.92
59	STURDYANT CAMP	S	60	3270	34-13-21	118-01-52	LOUIS LUMBERT	20.27	22.27
600	MURGER'S	SA	40	2412	34-12-32	118-04-02	LOUIS LUMBERT	20.500	22.00
610-E	SANTA ANITA DAM	SA	90	1007	34-11-03	118-11-12	RAYNET H. HILDER	19.00	20.00
610	SERRA MADRE-PEPPER RANCH	S	43	650	34-20-27	118-07-30	EDWARD E. LAMER	10.00	10.00
670	MONTEVISTA-MOUNTAIN AVENUE	S	70	607	34-18-04	117-49-04	WATER DEPT. PERSONNEL	INC.	10.00
680	SANIT DAM	SA	51	1374	34-13-30	117-49-07	JAMES T. McCLANAHAN JR.	20.20	21.10
73	GLYNOCRA-ENGLEBOLD RANCH	SA	51	1100	34-17-07	117-50-07	T.C. EDWARDS	17.00	17.00
780	COLUMBIA RANCH STATION	SA	40	1270	34-17-26	117-42-20	LACPCO PERSONNEL	20.0	20.7
800	PARISH RANCH	ST	24	5000	34-10-07	117-41-30	LACPCO PERSONNEL	20.33	19.10
810	VILLAGO CAP	ST	24	6000	34-22-26	117-45-24	LACPCO PERSONNEL	20.27	20.00
820	TABLE MOUNTAIN	S	50	7620	34-22-54	117-43-30	PAUL IVIE	13.78	13.10
830	BIG PINES RECREATION PARK	SA	40	6000	34-22-04	117-41-25	U.S.P.S. PERSONNEL	20.73	21.70
850	MT. BALBY GUARD	S	57	4240	34-14-12	117-30-32	U.S.P.S. PERSONNEL	20.00	20.20
890-E	SAN CINCAS DAM	SA	50	1350	34-20-10	117-40-10	BILLY R. McCLANAHAN	15.70	10.00
91	INDIAN HILL-CLAREMONT	S	60	1043	34-27-22	117-43-11	L. A. KAUSE	21.70	10.51
92	CLAREMONT-POPOKA COLLEGE	SA	45	1105	34-25-04	117-42-33	JACK C. MILLER	11.17	10.50
930	CLAREMONT-POLICE STATION	S, R/L	40	1170	34-25-04	117-42-33	PALICE DEPT. PERSONNEL	11.02	10.50
94	SAN DIMAS-PIRE RANCH	S	50	950	34-26-26	117-40-19	PIRE STATION PERSONNEL	10.70	10.32
940-E	PULINGSTONE DAM	SA	40	1730	34-20-04	117-40-04	T. A. GOSPOD	10.92	10.75
1020	WALNUT-PATROL STATION	S	50	400	34-20-12	117-42-14	PIRE STATION PERSONNEL	10.00	12.03
1020	WHITTIER CITY HALL	S	42	360	34-09-27	118-01-57	MARTHA BILBY	10.50	10.20
1070	SUNSET-PIRE DEPT.	S	52	130	34-15-04	118-00-02	PIRE STATION PERSONNEL	10.75	11.23
1080	EL MONTE FIRE STATION	S	50	270	34-09-30	118-02-00	PIRE STATION PERSONNEL	11.07	12.00
1080	EL MONTE AIRPORT	A	3	932	34-09-30	118-01-57	LACPCO	12.2	10.0
1090	WEST ARCADIA	S	42	407	34-17-02	118-00-22	PIRE STATION PERSONNEL	10.20	10.40
1100	ALHAMBRA CITY HALL	S	40	533	34-10-05	118-07-02	WATER DEPT. PERSONNEL	12.20	10.1
1110	SOUTH PASADENA CITY HALL	S	50	600	34-20-50	118-00-05	PIRE STATION PERSONNEL	11.55	15.45
1150	INGLEWOOD FIRE STATION	SA	50	133	33-57-53	118-21-22	PIRE STATION PERSONNEL	9.00	10.00
1170	COMPTON-FIRE STATION	S	53	70	33-53-02	118-13-20	PIRE STATION PERSONNEL	9.37	10.200
1180	WILMINGTON	S	40	60	33-57-27	118-15-25	D. E. BRICKSON	9.02	11.00
1190	SANFORD-SOLDIERS HOME	S	81	344	34-21-21	118-27-03	VEY. ADRIAN. PERSONNEL	8.00	10.07
120	VINCENT PATROL STATION	S	51	3135	34-24-17	118-20-27	PIRE STATION PERSONNEL	7.000	7.0000
1220	LEONIS VALLEY-ROCKET RANCH	S	40	3200	34-17-52	118-10-22	ROCKET RANCH	12.02	10.33
1240-E	ROCKET CANYON RESERVOIR	SP	50	3750	34-15-14	118-21-04	D.W.P. PERSONNEL	11.07	11.07
1240	SAN FRANCISCO CANYON POWER HOUSE NO.1	SP	60	2105	34-15-25	118-27-15	D.W.P. PERSONNEL	10.20	10.02
1260	VENICE FIRE STATION	S	40	55	33-40-32	118-27-10	PIRE STATION PERSONNEL	6.000	13.200
1270	DAY CANYON RESERVOIR	S	50	1511	34-24-50	118-11-02	EDWARD FIELDS	9.0000	11.20
1280	ELIZABETH LAKE LAKEVIEW	SA	50	2015	34-30-20	118-33-00	ARTHUR L. STEWART	13.30	13.00
1300	SHORELINE-QUAIL LAKE PATROL	S	50	4220	34-00-17	118-00-03	ROBERT PHILLIPS	13.10	13.20
1400	SANFELLS	AP	40	250	34-02-03	118-20-55	L.A. CITY PERSONNEL	9.00	10.200
1430	ALHAMBRA CITY PARK	S	40	610	34-08-03	117-50-17	ARTHUR M. BROWN	22.02	10.700
144	SERRA MADRE DAM	S	40	1100	34-10-30	118-02-32	L. CANNAN	22.23	17.17
150	LA MIRADA-STANDARD OIL COMPANY	SA	40	60	33-53-13	118-20-50	STANDARD OIL CO. PERSONNEL	9.35	10.0
1570	FL. SECUNDARY-STANDARD OIL COMPANY	S AP	40	150	33-50-57	118-20-50	STANDARD OIL CO. PERSONNEL	6.01	13.20
150	TURBINE PLATS	SP A	40	2750	34-12-07	117-40-03	U.S.P.S. PERSONNEL	10.00	20.70
1670	ARCADIA PUMPING PLANT NO. 1	S	40	611	34-09-31	118-02-32	PIRE STATION PERSONNEL	10.00	10.00
1700	SERRA MADRE PUMPING PLANT	SP	42	700	34-09-07	118-02-41	L. J. JONAHAN AND C. ASSEN	17.00	10.03
1720	PORTLAND HEIGHTS	S	51	205	34-22-32	118-00-00	SACALVIN BRINGER	11.00	9.02
1770	QUARTZ	S	50	500	34-20-00	117-40-02	JACK L. LUNGESS	10.73	10.70
1800	GLANDORA-ROCK	S	50	930	34-07-03	117-40-00	PIRE STATION PERSONNEL	13.02	10.70
1740	LA CANADA IRRIGATION DISTRICT	S	54	2020	34-13-10	118-12-00	LA CANADA IRRIG. DIST. PERSONNEL	10.72	10.30
1760	ALTAIR-ROCK CANYON	SP	50	1125	34-10-15	118-00-15	LAND IRRIG. ASSOC. PERSONNEL	10.03	10.02
1780	ALHAMBRA VALLEY WATER COMPANY	A	70	620	34-00-30	117-42-50	LACPCO PERSONNEL	12.1	10.3
180	RAILEY DEBRIS BASIN	A	82	1100	34-10-25	118-03-10	LACPCO PERSONNEL	12.4	10.75
180	GLANDORA-WEST	S	97	822	34-00-23	117-41-33	HERRILL WEST	13.70	10.75
1910	LOS ANGELES-ALCAZAR	SA	25	430	34-03-00	118-11-50	LACPCO PERSONNEL	9.05	12.00
1920	BELL-FIRE STATION	S, R/L	40	145	34-10-05	118-11-10	CHIEF J.M. CARROLL	9.0000	10.000
1930	COVINA TEMPLE	S	70	600	34-00-30	117-42-20	WILLIAM B. TEMPLE	11.21	10.07
1940	LA VERNE-FIRE STATION	S	71	1000	34-00-30	117-40-20	PIRE STATION PERSONNEL	12.70	10.31
1960	GRAND DEBRIS BASIN	S, R/L	60	925	34-11-00	118-10-32	LACPCO PERSONNEL	INC.	0150

RAINFALL STATION LOCATION AND SEASONAL AMOUNT (CONT'D)

STA. NO.	STATION NAME	TYPE OF GAGE	YEARS OF RECORD	ELEV. OF GAGE	NORTH LAT.	WEST LONG.	OBSERVER	SEASONAL 1975-76	RAINFALL 1976-77
1990	HUNTINGTON PARK	S	50	174	33-54-00	118-13-47	FIRE STATION PERSONNEL	7.80	10.65
200	SAUGUS-SO. CAL. Edison CO. SUBSTATION	S	49	1096	34-25-21	118-34-28	S.C.E. CO. PERSONNEL	9.24	10.80
201J	MACIENZA HEIGHTS	S	46	845	33-40-47	117-49-28	LACFCO PERSONNEL	13.1	12.1
208B	ANTHESIA	S	59	52	33-51-48	118-04-58	FIRE STATION PERSONNEL	8.08	9.43
212B	BRAND PARK	S	48	1230	34-11-18	118-10-20	LACFCO PERSONNEL	15.9	16.8
213G	LOS ANGELES-HANCOCK PARK	S	48	200	34-13-52	118-21-17	LACFCO PERSONNEL	9.3	14.7
214	GILFORDALE-JONES	SP	51	615	34-09-54	119-15-01	JAMES E. JONES	12.37	14.44
219	PACIFICA WAREHOUSE COUNTY FORESTAY	S	47	955	34-15-21	118-24-24	FIRE STATION PERSONNEL	9.3700	14.2700
222C	LANEBSHIN PUMPING PLANT	SP	46	717	34-11-39	118-23-17	D.W.P. PERSONNEL	9.78	14.38
223C-E	BIG TAYLOR DAM	SA	48	1587	34-10-06	117-48-36	GERALD H. THURASHER	19.95	19.53
224C	LONG BEACH ALAMITOS LAND COMPANY	S	82	240	33-46-01	118-11-44	ALAMITOS L. CO. PERSONNEL	6.77	10.57
225	WOLFMAN RANCH	S	97	47	33-53-35	118-07-49	LAKEMOOD WA. COPT. PERSONNEL	7.96	9.72
226B	BURBANK FIRE STATION	S	48	680	34-10-58	118-18-23	FIRE STATION PERSONNEL	11.62	14.39
227J	SAN GABRIEL-BRINGTON	S	46	472	34-06-18	118-08-32	R.E. BRINGTON	12.7600	14.38
228B	REVERLY HILLS-CITY HALL	S AP	52	235	34-04-27	118-27-57	FRED E. POWER	8.30	14.31
233C	MENNERICH PLATS	SP A	47	2552	34-11-38	119-05-17	R.C.W. PERSONNEL	26.010	21.21
237C-E	STONE CANYON RESERVOIR	SP	52	864	34-08-21	118-27-13	D.W.P. PERSONNEL	9.89	14.41
238	MULFORD DAM	SP	108	750	34-07-00	118-19-55	D.W.P. PERSONNEL	9.86	15.55
241C	LONG BEACH-CITY HALL	S AP	49	118	33-46-12	118-11-32	CITY OF LONG BEACH PERSONNEL	6.7900	10.4400
243C	CULVER CITY	SP	42	100	34-01-17	118-23-41	FIRE STATION PERSONNEL	INC.	213C
250C	ACTON CAMP	S	42	2625	34-27-02	118-11-55	ACTON CAMP PERSONNEL	9.4	8.33
251C	LA CRESCENTA	S	56	1159	34-13-20	118-14-40	LA CRES. VAL. WATER DIST. PERS.	16.54	17.37
252C-E	CATAIC DAM NO	S	47	720	34-28-53	118-30-17	D.W.P. PERSONNEL	13.16	14.27
255B	MT. SAN ANTONIO COLLEGE	S	59	844	34-02-41	117-45-19	J.G. PAGE	19.000	14.7700
256C	POMONA FIRE STATION	S	59	844	34-03-16	117-45-10	FIRE STATION PERSONNEL	19.000	14.7700
257	GRIFFITH PARK NURSERY	S	46	850	34-07-14	118-17-24	WILLIAM S. TOLIN	11.39	15.54
259J	CHATEAUNUEVE LAKES	SA	47	1275	34-18-43	118-35-41	D.C. CULBREATH	9.14	13.36
261B	ACTON-SCANDINO CANYON	S	41	2967	34-29-42	118-18-27	LACFCO PERSONNEL	8.1	13.94
2650	PUEBLO HILLS	S	52	845	33-57-28	117-55-28	P.J. BRISSEL JR.	12.40	11.94
269C	DIAMOND RAB-HORSE CAMP	SP AP	47	870	33-59-40	117-48-34	U.S.C.E. PERSONNEL	11.19	13.21
272J	L.A. WARDEN'S PUMPING PLANT	S	47	470	34-20-21	118-18-02	J.V. ZELERMAN	11.62	17.84
274B	ACTON-MURBARK	SP	78	3490	34-31-31	118-13-59	MRS. GUY L. LEE	7.50	6.96
277	SAN HILL MOUNTAIN RANCH	S	46	3700	34-43-19	118-35-00	RANCH PERSONNEL	10.01	10.54
279B	LOS ANGELES-CLARK MEMORIAL LIBRARY	S	47	203	34-02-09	118-18-46	FRANK ORSON	8.20	12.74
280C	SACRED HEART ACADEMY	S	45	1907	34-10-54	118-11-08	LACFCO PERSONNEL	17.5600	18.4
291C	CRYSTAL LAKE	SA	46	5174	34-19-02	117-50-28	U.S.F.S. PERSONNEL	30.84	23.520
2840	PLACERITA CANYON	S	49	1444	34-22-37	118-28-43	SAM HURT	15.52	18.22
287B	GLENORA	S, ALI	48	785	34-28-09	117-51-52	CITY OF GLENORA PERSONNEL	13.56	18.28
289	LAGUNA-BELL-S.C.E. CO. SUBSTATION	S	47	140	33-48-37	118-08-48	S.C.E. CO. PERSONNEL	9.28	10.78
292B	MONTREY PARK-FIRE STATION	SP	27	305	34-02-27	118-07-42	FIRE STATION PERSONNEL	17.2500	13.300
291	LAURENTH AND CENTRAL	S	47	121	33-46-36	118-13-17	LACFCO PERSONNEL	7.5	12.3
2920-E	LAURENTH RESERVOIR	SA	49	1074	34-08-54	118-33-57	E.E. HADWIN	9.63	15.69
293C	VAN NORMAN LAKE-L.A. RESERVOIR	SP	49	1152	34-17-19	119-28-54	D.W.P. PERSONNEL	10.35	14.63
294B	SERRA RAJBE-HIRA MONTE PUMPING PLANT	S	47	984	34-10-11	118-02-51	C. ASKEH AND L. CINNAMON	10.41	17.02
299C	GORHAM - JEMERIFF	S	5	3935	34-47-47	118-51-27	J. SYLVIES	12.35	14.34
299B	LITTLE ROCK	S	47	2500	34-31-35	117-58-30	BILL SCHMIDT	6.4700	7.210
299C	LITTLE ROCK-SCHMIDT	S	47	2500	34-32-32	117-58-30	REUBEN J. SCHWAB	6.0600	7.22
303F	MATSONICAL TECH	S	46	940	34-08-14	118-07-25	DR. W.H. BROOKS	14.20	15.84
304	SANIT CANYON-DEER PARK	S	47	2690	34-11-38	117-57-52	LACFCO PERSONNEL	28.4	27.7
304B	ZUMA BEACH	S	37	15	34-01-15	118-49-42	L.A. CO. LIFE GUARDS	11.52	10.77
311-E	PINE CANYON PATROL STATION	SA	47	3288	34-40-26	118-25-45	FIRE STATION PERSONNEL	12.84	10.11
327	PUNE VALLEY RANCH	S	47	2600	34-42-50	118-21-15	ARMED HUNT	7.16	16.83
334B-E	COSSWELL DAM	S	44	2320	34-14-37	117-57-35	P.J. WINDEN	26.90	24.52
334-F	SILVER LAKE RESERVOIR	SP AP	47	445	34-06-08	118-15-54	D.W.P. PERSONNEL	9.29	14.46
338A	MT. WILSON OBSERVATORY	S	45	5674	34-13-32	118-03-41	T. CRAGG	32.33	INC.
339B	MT. WILSON AIRWAYS	SP	38	5729	34-13-36	118-03-57	MARCIA E. WINN	38.32	29.65
341	ALISO CANYON-BLUM RANCH	S	46	2400	34-27-33	118-09-27	ELIZABETH BILLET	9.02	15.87
342C	UPLAND EUGLIO PUMPING PLANT	SP AP	45	1610	34-07-33	117-40-42	THOMAS E. CHAPPELL	11.07	14.53
347-E	RAJBEH PARK EXPERIMENTAL STATION	S	45	186	34-15-40	117-57-40	LACFCO PERSONNEL	11.97	13.55
349D	CAMP RINCON	S, ALI	45	1510	34-14-28	117-51-45	LACFCO PERSONNEL	19.94	20.73
352B	LECHUEZ PATROL STATION	S AP	45	1620	34-04-38	118-52-47	FIRE STATION PERSONNEL	12.35	14.49
354B	LOS ANGELES-CITY COLLEGE	S AP	44	310	34-05-14	118-17-28	METEOROLOGICAL DEPARTMENT	8.49	14.63
356C	SPAUER-CAPIC COLONY	SA	33	690	34-32-31	117-48-35	J. E. STULL	11.07	15.01
357	VAN NORMAN LAKE-UPPER	SP AP	49	1248	34-18-49	118-20-17	D.W.P. PERSONNEL	19.79	19.56
363C	WILSON CANYON	ST	22	3175	34-21-17	118-27-00	LACFCO PERSONNEL	19.34	18.30
364B	HAIRNS CANYON-LOWER	S	49	2530	34-19-56	118-16-07	JAMES P. KINORFO	20.83	20.31
365C	MT. LUKENS	SP	31	5040	34-10-09	118-14-06	U.S.F.S. PERSONNEL	13.03	12.54
367	HAIRNS CANYON-UPPER	SP A	44	3447	34-18-18	118-13-07	JAMES P. KINORFO	28.09	21.85
372	SAN FRANCISCO POWER HOUSE NO. 2	SP A	47	1580	34-32-02	118-31-27	D.W.P. PERSONNEL	19.98	13.68
375C	BRIGGS TERRACE	SA	43	2209	34-14-17	118-13-27	R.T. SIENS	19.95	18.67
377B	LARE SHERWOOD ESTATES	SP	42	960	34-08-26	118-52-31	FIRE STATION PERSONNEL	10.40	10.84
379B	SAN GABRIEL-EAST FORK	SA	44	1600	34-14-09	117-48-19	LACFCO PERSONNEL	19.44	19.28
380C	ZUMA CANYON-DAMLEY	S	42	1509	34-24-58	118-09-30	BEATRIZ DAKLEY	15.63	10.78
387B	COVINA CITY YARD	S	42	508	34-05-02	117-53-57	CITY OF COVINA PERSONNEL	10.41	13.10
388D	PARADISE CO. FIRE STATION	S, ALI	42	60	33-43-30	118-10-02	FIRE STATION PERSONNEL	7.22	8.710
399B-E	MORRIS DAM	SP	47	1210	34-10-53	117-52-43	EVERETT PUTNAM	17.77	17.18
391C	MONTRELU-FIRE DEPARTMENT	S, ALI	35	259	34-01-48	118-06-14	FIRE STATION PERSONNEL	9.46	11.51
394	HIGHLAND PARK-LINOSAY	S	82	424	34-07-46	118-10-19	MRS. ELIZABETH S. STEVENS	12.04	15.79
394B	OLIVE VIEW SANITARIUM	S	43	1425	34-14-29	119-26-55	LACFCO PERSONNEL	12.01	16.08
402F	CEAR SPRINGS	S	39	6780	34-21-41	117-52-34	LACFCO PERSONNEL	23.6	19.6
403B	SOLEAD CANYON	S	41	2150	34-26-23	118-17-33	B. CHAPMAN	11.19	19.68
406C	WEST ALISA	S	41	905	34-06-53	117-34-46	L. BROWN & E. HECK	12.12	12.25
409B	RIDGE ROUTE-STATE HWY MAINTENANCE STATION	SP AP	41	2505	34-40-34	118-46-47	D.W.P. PERSONNEL	11.44	12.55
415	SIGNAL HILL-CITY HALL	SA	40	140	33-47-49	118-13-03	R. B. MEERS	6.76	10.04
419B	SANTA CLARA RIDGE-MT. GLEASON	ST	37	3420	34-22-36	118-12-23	LACFCO PERSONNEL	INC.	11.0600
422C	ACTON-COLUMBO RANCH	S	40	3000	34-25-41	118-11-52	CHRISTOPHER C. BREVEDORO	8.4400	9.06
422C	PACIFICA CANYON	S	42	2075	34-20-51	118-22-12	MRS. ENGLISH	21.3900	21.08
423C	ANGELES FOREST-ALISO CANYON	S	40	3810	34-24-36	118-03-26	LACFCO PERSONNEL	13.33	13.00
425B-E	SAN GABRIEL DAM	SA	39	1481	34-12-19	117-51-38	TONY H. GEORGE	20.33	19.80
432	SANTA ANITA-FERN LODGE	S	39	2035	34-12-32	119-01-03	LOUIS LUBBERT	26.40	22.47
433C	FAIR DARS DEBRIS BASIN	S	39	1585	34-12-15	118-08-18	LACFCO PERSONNEL	20.18	18.6
434	AGOUR	SA	39	800	34-04-08	118-04-08	FIRE STATION PERSONNEL	8.95	11.49
435	WHITE HILL	SA	39	800	34-04-41	118-04-19	FIRE STATION PERSONNEL	10.39	18.25
436C	HANSEN DAM	AP	39	1110	34-16-08	118-23-59	U.S.C.E. PERSONNEL	10.83	11.17
440D	CHELSEA-USFS CAMP	S	38	9220	34-20-40	118-01-23	U.S.F.S. PERSONNEL	10.59	19.440

RAINFALL STATION LOCATION AND SEASONAL AMOUNT (CONTD.)

STA. NO.	STATION NAME	TYPE OF GAGE	YEARS OF RECORD	ELEV. 3P GAGE	NORTH LAT.	WEST LONG.	OBSERVER	SEASONAL 1975-76	RAINFALL 1976-77
442C	MESCAL CREEK	S	30	3570	34-29-05	117-04-10	M. J. PAUL	7.00	8.44
443D	LATIGO CANYON-BEACH RANCH	S	30	1700	34-05-15	118-04-52	MRS. A. J. BEACH	13.81	15.00
444P-E	ROLLING HILLS-SOUTH COAST BOT. GARDENS	SA	40	400	33-07-05	118-20-15	BOTANICAL GARDENS PERSONNEL	7.00	10.07
445B	LIVE OAK DAM	0.01" A	30	1510	34-08-22	117-00-10	LACPCD PERSONNEL	13.70	17.10
446	ALISO CANYON-JAY CANYON	SA	30	2367	34-18-53	118-13-25	RICHARD E. POPE	12.00	17.00
447C	CARDON CANYON	S	30	50	34-22-18	118-38-34	FIRE STATION PERSONNEL	7.10	13.12
447B	EATON WASH DAM	SA	40	800	34-13-00	118-05-33	JOHN C. PARK	17.70	10.16
448C	DEVIL'S GATE DAM	SA	30	1900	34-11-00	118-10-19	RICHARD F. GARRISON	17.03	10.19
449B	LANCASTER-STATE HWY MAINTENANCE STATION	S	37	2399	34-00-57	118-26-02	HIGHWAY MAINTENANCE PERSONNEL	3.03	8.01
450	PIUTE BUTTE	S	37	2000	34-39-02	117-50-57	WILLIAM SCHONBERGER	3.57	5.92
450	ZUMA CANYON PATROL STATION	SA	37	115	34-51-10	118-07-02	FIRE STATION PERSONNEL	9.32	12.13
460C	PLEASANT VIEW MESA	S	37	3960	34-27-02	117-55-51	JAMES W. STEPLE	8.05	17.79
462B	HILLCREST COUNTRY CLUB-LOS ANGELES	S	37	145	34-02-54	118-24-04	DAVID HASTROLOLO	8.07	15.29
465C	SEPIALVEGA DAM	AP	32	803	34-10-00	118-28-11	U.S.C.E. PERSONNEL	8.20	13.43
466B	PACIOJA CANYON-DUTCH LOUIE CANYON	A	36	3225	34-21-07	119-20-10	LACPCD PERSONNEL	20.7	19.7
468	PICKENS DEBRIS BASIN	0.01" A	34	1605	34-13-10	118-13-05	LACPCD PERSONNEL	19.0100	015C.
477	TUJUNGA-WILL CREEK	SA	30	4000	34-22-09	118-09-05	LACPCD PERSONNEL	INC.	INC.
471	LITTLE TUJUNGA-GOLD CREEK	AP	36	2750	34-18-57	118-10-02	U.S.C.E. PERSONNEL	17.55	16.02
474B	SOUTH GATE FIRE STATION	0.01" A	30	130	33-57-16	118-12-03	FIRE STATION PERSONNEL	8.60	10.50
477D	SANTA ANITA-SPRING CAMP	SA	36	4715	34-12-52	117-58-56	R.A. WINDER	27.07	23.120
478	VALVERDE-USFS HEADQUARTERS	SP	35	3710	34-26-00	117-51-10	U.S.F.S. PERSONNEL	6.25	9.470
480B	YEMPLE CITY FIRE STATION	S	32	904	34-08-31	118-03-25	FIRE STATION PERSONNEL	10.22	12.36
482	LOS ANGELES-HUC	S	35	208	34-01-14	118-17-19	STANLEY S. GUTLER	8.18	12.07
486C	WALKER RANCH	A	34	3725	34-15-00	118-12-00	LACPCD PERSONNEL	22.10	15.00
488B	RAGEL CANYON PATROL STATION	S	34	1450	34-17-05	118-22-30	FIRE STATION PERSONNEL	13.30	15.22
491J	PACIFIC PALISADES	S	33	293	34-22-22	118-31-03	LINE GENDRESE	9.25	15.38
492A	CHILAD-STATE HIGHWAY MAINTENANCE STATION	A	33	5205	34-10-02	118-00-30	LACPCD PERSONNEL	23.5	21.7
493U	SAND CANYON-CHILLAN	SA	33	1805	34-23-17	118-24-50	FIRE STATION PERSONNEL	17.010	17.41
497	CLAREMONT-SLAUGHTER	0.01" A	29	1350	34-27-35	117-53-55	FRANK E. SLAUGHTER	12.57	16.19
498	ANGEL CREST HWY DAM CANYON TRAIL	A	33	2800	34-15-21	118-11-05	LACPCD PERSONNEL	22.07	19.0
517B	LEWIS RANCH	SA	49	4015	34-25-12	117-53-11	PHIL LEWIS	13.20	14.81
522	FAIRMONT	SP	60	3750	34-02-15	118-25-07	A.S. MAJORS	17.51	14.79
560A	LA VERNE HEIGHTS	S	34	1210	34-08-08	117-45-02	MAURICE L. HAGEY	13.35	16.57
564C	CLAND	S	47	2990	34-29-13	117-40-02	R. SLACKER	7.14	9.300
565B	LONG BEACH-CITY AUTOMATIC	AP	30	11	33-47-16	118-12-30	CITY OF LONG BEACH PERSONNEL	3.0000	12.300
566	LUNA BEACH-CITY	SP AP	52	15	33-00-00	118-30-34	CITY OF LONG BEACH PERSONNEL	0.0100	10.170
568D	MOUNT LONE	ST	69	4435	34-13-37	118-06-33	LACPCD PERSONNEL	28.9	20.03
591B	SANTA ANITA RESERVOIR	S	0	1209	34-11-08	118-20-16	PASADENA CITY EMPLOYEES	12.73	13.670
593B	PIRU-MEADALL RANCH	S	65	774	34-20-05	118-03-24	RANCH PERSONNEL	4.1	12.49
617B	PASADENA-CITY HALL	SP	42	964	34-28-54	118-08-34	CITY OF PASADENA PERSONNEL	13.77	15.54
611C	ALTADENA-GOLF COURSE	0.01" A	70	1186	34-10-08	119-07-31	LACPCD PERSONNEL	14.03	13.900
612	PASADENA-CHLORINE PLANT	SP	61	1109	34-12-04	118-09-09	CITY OF PASADENA PERSONNEL	17.94	15.90
613C	PASADENA-BENNETT	S	39	779	34-07-15	118-08-30	FIRE STATION PERSONNEL	13.00	13.650
619	SAN ANTONIO CANYON SIERRA POWER HOUSE	S	72	1112	34-12-29	117-00-26	LACPCD PERSONNEL	16.07	20.0
627	SAN GABRIEL CANYON-POWER HOUSE	SP A	70	764	34-20-05	117-54-29	OTTO KIRCHSEE	15.25	10.55
634C	SANTA MONICA	SP	50	96	34-00-03	118-29-27	SANTA MONICA CITY PERSONNEL	7.40	12.30
647	TUJUNGA	AP	60	1605	34-15-03	118-17-34	JAMES D. PARAS	16.75	17.42
662J	LUNA BEACH-USD AP	AP	57	34	34-00-30	118-09-03	ACB STEWART	0.000	9.35
672	EAGLE ROCK-SO.CAL. Edison CO. SUBSTATION	SP	43	450	34-09-02	118-10-57	S.C.E.C. PERSONNEL	14.01	16.02
673D	ALAMITOS DAY	0.01" A	49	15	33-45-13	118-07-51	LACPCD	0.49	10.35
680B	WESTWOOD-UCLA	SP	45	430	34-04-10	118-26-30	WIRER BOROWSKI	7.04	16.72
681A	SIERRA MADRE RANGER STATION	S	30	935	34-13-15	118-01-54	USFS PERSONNEL	INC.	015C.
687	SUNSET RIDGE GUARD STATION	SP AP	30	2110	34-12-53	118-08-07	T. ARNOT	10.37	17.03
694F	SIO TUJUNGA CANYON	AP	21	1525	34-17-22	118-17-17	LACPCD PERSONNEL	15.3	15.3
694B	TUJUNGA CANYON-VOGEL PLAT	S	62	1550	34-17-12	118-13-12	U.S.F.S. PERSONNEL	21.03	19.23
703	GLENDALE-MCINTYRE	SP	18	603	34-09-03	118-14-27	P.T. MCINTYRE	12.20	15.44
716	LOS ANGELES-MUCKAMUN STREET	SP A	105	306	34-03-09	118-14-13	D.W.P. PERSONNEL	17.24	11.05
718C	THOUSAND JAKS	S	34	807	34-13-06	118-14-50	VENTURA CO. FLOOD CONTROL	7.31	17.980
727B	SIMI VALLEY-SUSANA KNOLLS	SP	35	1084	34-15-00	118-03-10	SUSANA KNOLLS FIRE DEPT. PERSONNEL	10.5700	13.700
722C	RELEVIER	SP	30	2800	34-37-23	118-13-55	PHOEBE S. CURRELL	7.400	10.75
725B	BIRTINGHAM HOSPITAL	AP	32	728	34-11-13	118-10-17	U.S.C.E. PERSONNEL	INC.	015C.
726C	ANGELES CAST GUARD STA.	S	27	2707	34-14-31	118-11-34	USFS PERSONNEL	22.15	INC.
727B	NEWCOMB PASS	S	32	625	34-14-17	118-01-04	LACPCD PERSONNEL	20.5500	21.320
729	PACIOJA CANYON-CITY ROAD GAUGE	SP	32	1175	34-21-02	118-18-25	T. ARNOT	25.01	29.74
731	DAM GROVE HOOTS USFS FLOOD CONTROL	SP	32	1000	34-11-07	118-13-07	T. ARNOT	15.90	10.42
732B	ROBERTS CN.-SAN GABRIEL WEST FORK DIVIDE	ST	30	6130	34-13-35	117-55-15	LACPCD PERSONNEL	23.05	4.9
734C	L.A. INTERNATIONAL AIRPORT	SP AP	30	105	33-56-25	118-23-06	U.S.-L.A. PERSONNEL	0.27	13.74
734D	EL SEGUNDO-CURIA	S	1	125	33-55-52	118-25-07	GUY CURIA	NAI.	14.45
735A	SELL CANYON	A	25	895	34-11-00	118-30-23	LACPCD PERSONNEL	9.3	12.0
747B	SAN OLINAS CANYON-FERN NO.2	SP AP	30	5240	34-11-00	117-41-05	U.S.F.S. PERSONNEL	22.07	22.73
741	SAN DIMAS CANYON-UPPER EAST FORK	AP	43	2745	34-11-01	117-00-25	U.S.F.S. PERSONNEL	21.51	22.23
742C	SAN GABRIEL FIRE DEPT.	SP	30	404	34-06-11	118-05-15	FIRE STATION PERSONNEL	16.15	14.04
747	SANDBERG-AIRWAYS STATION	SP AP	43	4517	34-00-07	118-03-29	U.S.-L.A. PERSONNEL	12.01	11.04
749A	BURBANK	SP AP	40	855	34-11-11	118-20-54	PUMP STATION OPERATORS	19.71	16.26
750	PALMDALE-P.A.A. AIRPORT	SP	13	2520	34-37-02	118-05-00	P.A.A. AIRPORT PERSONNEL	4.50	015C.
755	GRIFFITH PARK-LITTLE CANYON	AP	30	430	34-07-32	118-16-58	CITY OF L.A. PERSONNEL	9.920	15.020
757	GRIFFITH PARK-ROCK OVEN	AP	30	740	34-18-10	118-18-10	CITY OF L.A. PERSONNEL	8.000	15.000
758	GRIFFITH PARK-LOWER SPRING CANYON	AP	30	607	34-20-32	118-17-27	CITY OF L.A. PERSONNEL	10.9200	10.62
759B	NICHOLS DEBRIS BASIN	AP	29	440	34-06-22	118-21-31	CITY OF L.A. LACPCD PERSONNEL	11.25	10.71
760B	STUDIO CITY-BERMAN AVE	AP	30	627	34-00-55	118-24-24	CITY OF L.A. PERSONNEL	9.000	17.100
762	UPPER STONE CANYON	AP	30	943	34-37-27	118-27-14	CITY OF L.A. PERSONNEL	11.300	10.100
767	THANOSVILLE CANYON ROAD	AP	31	1100	34-06-24	118-30-10	CITY OF L.A. PERSONNEL	10.020	10.13
771B	PACIFIC PALISADES-RIVERA COUNTRY CLUB	S	1	315	34-03-03	118-20-59	DAVID GIESLER	10.94	16.37
772	L.A.-TECH PARK AND LUCRETIA	AP	30	475	34-35-02	118-15-11	CITY OF L.A. PERSONNEL	0.970	13.00
783	COON CANYON	SP AP	29	1350	34-12-07	118-16-12	T. ARNOT	17.00	10.32
786	COON CANYON	SP	29	2250	34-13-18	118-20-07	T. ARNOT	18.74	15.04
788	COON CANYON	SP	29	1710	34-12-50	118-14-00	T. ARNOT	19.01	10.44
789	EL PRISTO CANYON	SP	29	2325	34-13-32	118-08-19	T. ARNOT	21.46	17.03
794A	LOWER FRANKLIN RESERVOIR	SP	29	549	34-09-03	118-24-07	D.C. HADDER	8.49	10.30
795	PASADENA-JORDAN	SP	28	705	34-08-52	118-05-14	CITY OF PASADENA PERSONNEL	14.03	10.00
796	ELYSIAN PARK-FIRE DEPT.	AP	29	757	34-04-55	118-14-22	CITY OF L.A. PERSONNEL	8.730	11.03
797	DE SOTO RESERVOIR	SP	29	1127	34-05-12	118-35-12	G. O. McLELLAN	8.37	12.77
801B	MAGIC MOUNTAIN	AP	30	4720	34-23-18	118-19-27	U.S.C.E. PERSONNEL	19.790	14.70
802C-E	EAGLE ROCK RESERVOIR	SP	30	470	34-08-07	118-11-25	P. LAZAR	13.20	16.70
807	ASCOT RESERVOIR	SP A	30	620	34-04-06	118-11-14	ALBERT ARROYO	10.73	10.22

RAINFALL STATION LOCATION AND SEASONAL AMOUNT (CONTD.)

STA. NO.	STATION NAME	TYPE OF GAGE	YEARS OF RECORD	ELEV. OF GAGE	NORTH LAT.	WEST LONG.	OBSERVER	SEASONAL RAINFALL 1975-76	RAINFALL 1976-77
442C	MESCAL CREEK	S	38	3570	34-29-05	117-44-17	M. J. PAUL	7.49	8.44
442B	LATIGO CANYON-BEACH RANCH	S	38	1707	34-01-19	118-04-52	MRS. A. J. BRACH	13.81	15.00
444F-6	ROLLING HILLS-SOUTH COAST BOT. GARDENS	SA	46	400	33-47-05	118-20-15	BOTANICAL GARDENS PERSONNEL	7.60	16.47
445B	LIVE OAK DAM	SA	38	1517	34-08-02	117-44-38	LACFCO PERSONNEL	13.76	17.19
446	ALISO CANYON-JAY CANYON	SA	38	2367	34-13-51	118-13-25	RICHARD S. POPE	12.48	17.44
447C	CARBON CANYON	S	38	50	34-22-18	118-38-56	FIRE STATION PERSONNEL	7.16	13.12
449B	EATON WASH DAM	SA	40	887	34-13-08	118-05-33	JOHN C. PARK	17.76	16.18
453C	DEVILS GATE DAM	SA	38	1809	34-11-08	118-10-19	RICHARD E. CARLSON	15.63	16.19
455B	LANCASTER-STATE HWY MAINTENANCE STATION	S	37	2394	34-00-57	118-06-02	HIGHWAY MAINTENANCE PERSONNEL	3.83	6.01
456	PIUTE BUTTE	S	37	2880	34-39-02	117-10-57	WILLIAM SCHWENBERGER	3.57	5.52
458	ZUMA CANYON PATROL STATION	SA	37	115	34-31-10	118-47-42	FIRE STATION PERSONNEL	9.33	12.13
460C	PLEASANT VIEW MESA	S	37	3960	34-27-43	117-55-51	JAMES W. STEPLE	8.85	12.79
462B	HILLCREST COUNTRY CLUB-LOS ANGELES	S	37	185	34-02-56	118-24-04	DAVID MASTROLEN	8.87	13.29
462C	SEPULVEDA DAM	AP	32	883	34-10-08	118-28-11	U.S.C.E. PERSONNEL	8.20	13.43
468B	PACIFICA CANYON-CLUB LOUIE CANYON	A	36	3227	34-21-07	119-20-18	LACFCO PERSONNEL	20.7	19.7
468	PICKENS DERRIS BASIN	B.P.I.	34	1607	34-13-18	118-13-45	LACFCO PERSONNEL	19.0199	DISC.
470	TUJUNGA-MILL CREEK	SA	36	4600	34-23-09	118-05-45	LACFCO PERSONNEL	INC.	INC.
471	LITTLE TUJUNGA-GOLD CREEK	AP	36	2750	34-18-57	118-18-02	U.S.C.E. PERSONNEL	17.55	16.02
474B	SOUTH GATE FIRE STATION	B.P.I.	36	130	33-57-16	118-12-43	FIRE STATION PERSONNEL	8.60	10.58
4770	SANTA ANITA-SPRING CAMP	SA	36	4715	34-12-52	117-58-56	R.A. WENDER	27.47	23.124
478	VALVERDE-USPS HEADQUARTERS	SP	35	3710	34-26-44	117-51-10	U.S.P.S. PERSONNEL	8.25	9.74
480B	TEMPLE CITY FIRE STATION	S	34	604	34-06-31	118-03-29	FIRE STATION PERSONNEL	10.22	14.36
482	LOS ANGELES-USC	S	35	208	34-11-14	118-17-15	STANLEY S. OUTLER	8.38	12.77
486C	WALKER RANCH	A	34	3720	34-15-30	117-42-57	LACFCO	25.1	21.4
488B	HAGEL CANYON PATROL STATION	S	34	1450	34-17-45	119-22-30	FIRE STATION PERSONNEL	13.30	19.22
491J	PACIFIC PALISADES	S	33	291	34-02-22	118-31-43	LENE GENOVSE	9.25	15.38
492A	CHILLAG-STATE HIGHWAY MAINTENANCE STATION	A	33	9280	34-19-42	118-06-37	LACFCO PERSONNEL	23.5	21.7
493U	SARNO CANYON-MILLAN	SA	33	1809	34-23-17	118-24-59	FIRE STATION PERSONNEL	17.019	17.51
497	CLAREMONT-SLAUGHTER	B.P.I.	33	1350	34-07-15	117-43-55	FRANK E. SLAUGHTER	12.57	16.29
498	ANGELEY CREST HWY DARK CANYON TRAIL	A	33	2820	34-15-21	118-11-49	LACFCO PERSONNEL	22.45	19.0
517B	LEWIS RANCH	SA	49	4615	34-25-12	117-53-11	PHIL LEWIS	13.28	14.81
542	PAIMPUT	SP	68	3950	34-42-15	118-25-43	A.S. MAJORS	17.51	14.79
560A	LA VERNE HEIGHTS	S	34	1210	34-08-48	117-45-02	MAURICE L. HAGEY	13.35	16.87
564C	LEAND	S	47	3490	34-28-13	117-10-07	E. DEALOR	7.14	9.4399
4656	LUNG BEACH-CITY AUTOMATIC	AP	30	11	33-47-18	119-12-28	CITY OF LONG BEACH PERSONNEL	3.0000	12.109
566	LUNG BEACH NO.1	SP AP	42	15	33-46-46	118-08-34	CITY OF LONG BEACH PERSONNEL	8.6199	10.179
5880	MOUNT LOWE	ST	49	4435	34-13-37	118-08-36	LACFCO PERSONNEL	28.9	20.73
4918	SANTA ANITA RESERVOIR	S	8	1205	34-11-08	118-06-16	PASADENA CITY EMPLOYEES	12.73	13.674
4938	PIRU-NEWMALL RANCH	S	45	774	34-24-05	118-43-24	RANCH PERSONNEL	9.11	12.49
612B	PASADENA-CITY HALL	SP	42	464	34-08-54	118-08-34	CITY OF PASADENA PERSONNEL	13.77	15.94
611C	ALTADENA-GOLF COURSE	B.P.I.	78	1186	34-10-48	119-07-21	LACFCO PERSONNEL	14.63	13.909
612	PASADENA-CHLORINE PLANT	SP	39	1100	34-14-46	118-09-49	CITY OF PASADENA PERSONNEL	17.94	15.96
613C	PASADENA-BENNETT	S	61	779	34-07-15	119-08-04	FIRE STATION PERSONNEL	13.68	13.659
619	SAN ANTONIO CANYON SIERRA POWER HOUSE	S	72	3112	34-12-29	117-40-26	LACFCO PERSONNEL	26.87	26.0
627	SAN GABRIEL CANYON-POWER HOUSE	SP A	78	744	34-09-40	117-54-29	OTTO KIRNSEE	19.25	16.55
634C	SANTA MONICA	SP	54	94	34-00-43	118-29-27	SANTA MONICA CITY PERSONNEL	7.46	12.80
647J	TUJUNGA	SP	60	1685	34-15-45	119-17-34	JAMES J. PARRA	16.75	17.42
647J	LUNG BEACH -SD AP	AP	57	34	33-49-30	118-09-07	AGB STEWART	6.46	9.35
672	PAGLE ROCK SO. CALIFORNIA CO. SUBSTATION	AP	43	950	34-09-02	118-10-57	U.S.C.E. PERSONNEL	16.61	16.02
6730	ALAMITOS DAY	B.P.I.	49	15	33-45-13	118-07-51	LACFCO	8.49	10.35
680B	WESTWOOD-UCLA	SP	45	430	34-06-10	118-26-30	WIRER BOROWSKI	7.84	14.72
681A	SIERRA MADRE RANGER STATION	S	39	935	34-13-45	118-01-54	USPS PERSONNEL	INC.	DISC.
683	SUNSET RIDGE GUARD STATION	SP AP	36	2110	34-12-53	118-08-47	T. ARNOT	19.37	17.63
694F	910 TUJUNGA CANYON	A	21	1525	34-17-22	118-17-17	LACFCO PERSONNEL	15.1	15.1
698B	TUJUNGA CANYON-VOGEL PLAT	S	42	1950	34-17-12	119-13-32	U.S.P.S. PERSONNEL	21.63	19.73
703	GLENDALE-MCINTYRE	SP	19	603	34-09-03	118-14-27	P.T. MCINTYRE	12.28	14.44
716	LOS ANGELES-MCDONNELL STREET	SP A	105	306	34-14-13	118-14-13	G.M.P. PERSONNEL	14.74	11.55
718C	THOUSAND JARS	SP	34	805	34-11-38	118-41-56	VENTURA CO. FLOOD CONTROL	7.31	12.889
720B	5TH VALLEY-SUSANA KNOLLS	S	35	1085	34-15-40	118-03-10	SUSANA KNOLLS FIRE DEPT. PERSONNEL	10.5799	13.379
722L	RELLEVIEW	S	30	2490	34-37-23	118-13-55	PHOEBE S. CURBELL	7.469	10.78
725B	BIRMINGHAM HOSPITAL	AP	32	728	34-11-13	118-10-17	U.S.C.E. PERSONNEL	INC.	DISC.
726C	ANGELES CARST GUARD STA.	S	27	2107	34-14-31	118-11-34	USPS PERSONNEL	22.15	INC.
727B	NEWCOMB PASS	S	32	4125	34-01-17	118-01-04	LACFCO PERSONNEL	24.5599	24.529
729	PACIFICA CANYON-CITY ROAD GAUGE	SP	32	3115	34-21-42	119-18-45	T. ARNOT	25.61	23.74
731	OAK GROVE MOJOS USFS FLOOD CONTROL	STP	32	1080	34-11-47	118-10-29	T. ARNOT	19.96	16.16
732B	ROBERTS CIL-SAN CARTEL WEST FORK DIVIDE	ST	30	4130	34-13-37	117-55-15	LACFCO PERSONNEL	23.85	9.4
734C	L.A. INTERNATIONAL AIRPORT	SP AP	36	105	33-54-25	119-23-44	U.S.A.B. PERSONNEL	6.17	13.45
734U	EL SEGUNDO-CURIA	S	1	125	33-55-52	118-15-07	GUY CURIA	14.45	14.45
737H	SELL CANYON	A	25	895	34-11-40	118-14-24	LACFCO PERSONNEL	9.1	12.9
740B	SAN DIMAS CANYON-FERN NO.2	SP AP	36	5240	34-11-48	117-41-49	U.S.P.S. PERSONNEL	22.97	22.73
741	SAN DIMAS CANYON-UPPER EAST FORK	AP	43	2765	34-11-41	117-44-24	U.S.P.S. PERSONNEL	21.51	22.23
742C	SAN CARTEL FIRE DEPT.	SP	38	445	34-08-11	118-05-56	FIRE STATION PERSONNEL	14.25	14.45
744B	SANDBERG-AIRWAYS STATION	SP AP	45	4517	34-04-47	118-43-29	U.S.A.B. PERSONNEL	12.91	11.48
749	BURBANK	SP AP	46	655	34-11-11	118-12-54	PUMP STATION OPERATORS	15.71	16.28
750	PALMDALE-PALMDALE AIRPORT	SP	13	2924	34-37-45	118-05-00	PALMDALE AIRPORT PERSONNEL	4.50	DISC.
755	GRIFFITH PARK-LITTLE CANYON	AP	30	430	34-07-32	118-16-58	CITY OF L.A. PERSONNEL	9.929	15.829
757	GRIFFITH PARK-FERN DELL	AP	30	750	34-07-32	118-18-20	CITY OF L.A. PERSONNEL	8.459	13.759
758	GRIFFITH PARK-LOWER SPRING CANYON	AP	30	607	34-08-12	118-17-27	CITY OF L.A. PERSONNEL	10.9299	14.42
759B	NICHOLS DEBRIS BASIN	AP	29	440	34-08-22	118-21-31	CITY OF L.A. LACFCO PERSONNEL	11.25	16.71
760B	STUDIO CITY-BERMAN AVE	AP	10	627	34-08-55	118-14-24	CITY OF L.A. PERSONNEL	9.689	17.199
762	UPPER STONE CANYON	AP	30	943	34-27-27	118-27-14	CITY OF L.A. PERSONNEL	11.189	19.199
767	WADSWORTH CANYON ROAD	AP	31	1160	34-08-24	118-10-10	CITY OF L.A. PERSONNEL	10.309	16.13
771B	PACIFIC PALISADES-PIVIERA COUNTRY CLUB	S	1	315	34-33-03	118-29-59	DAN GIFFELER	10.74	14.37
772	L.A.-ECHO PARK AND LUCRETIA	AP	30	475	34-25-02	118-15-11	CITY OF L.A. PERSONNEL	9.879	13.60
783	COON CANYON	SP AP	29	1359	34-12-47	118-10-12	T. ARNOT	17.88	16.32
786	COON CANYON	SP	29	2250	34-13-18	118-09-47	T. ARNOT	18.74	19.44
788	COON CANYON	SP	29	1710	34-12-56	118-10-00	T. ARNOT	19.01	16.44
789	EL PRIETO CANYON	SP	29	2325	34-13-32	118-09-19	T. ARNOT	21.44	17.63
790C	LOWER FRANKLIN RESERVOIR	SP	29	545	34-05-43	118-24-43	D. G. MAVER	8.49	16.14
795	PASADENA-JOURDAN	SP	28	705	34-08-52	118-05-14	CITY OF PASADENA PERSONNEL	14.81	16.40
796	ELYSIAN PARK-FIRE DEPT.	AP	29	757	34-04-55	118-14-22	CITY OF L.A. PERSONNEL	8.739	11.63
797	DE SOTO RESERVOIR	SP	29	1127	34-10-17	118-35-12	M. G. MCCELLAN	8.37	12.47
801B	PACIFIC MOUNTAIN	AP	30	4720	34-23-18	118-19-27	U.S.C.E. PERSONNEL	19.599	14.70
802C-8	PAGLE ROCK RESERVOIR	SP	30	470	34-08-47	118-11-23	F. LAFAR	13.70	14.70
807	ASCUT RESERVOIR	SP A	30	620	34-04-46	118-11-14	ALBERT ARROYO	10.73	14.22

RAINFALL STATION LOCATION AND SEASONAL AMOUNT (CONTD.)

STA. NO.	STATION NAME	TYPE OF GAGE	YEARS OF RECORD	ELEV. OF GAGE	NORTH LAT.	WEST LONG.	OBSERVER	SEASONAL 1975-76	RAINFALL 1976-77
1000	HUNT CANYON-BONES RANCH	S	31	3263	34-10-48	118-03-37	MRS. L. A. BONES	7.15	9.810
1001	HUNT CANYON-FIRE STATION	S	31	2300	34-10-15	118-21-40	FIRE STATION PERSONNEL	9.40	8.72
1002	SAN PEDRO-CITY RESERVOIR	S	31	190	33-04-37	118-17-47	CITY EMPLOYEES	6.71	17.300
1003	CAMP VALCREST	S	31	920	34-20-00	117-48-41	R.C. WOODCOCK	20.500	20.250
1004-E	LA PRESA-S.C.E.-CO.	S	31	69	33-52-07	118-10-55	S.C.E. CO. PERSONNEL	9.90	14.50
1005	HUNT CANYON-HAMMUTH	S	31	1624	34-26-06	119-20-06	JOE J. HAMMUTH	9.40	17.10
1006	PALMER CANYON-ROBAS	S	30	2106	34-08-32	117-02-06	LACFCO PERSONNEL	16.92	19.35
1007	PALUS VERDAS FIRE STATION	S	30	1275	34-05-25	118-21-11	FIRE STATION PERSONNEL	7.44	14.250
1008	CASTAIC JUNCTION	A	30	1005	34-26-18	118-16-43	FIRE STATION PERSONNEL	9.06	11.70
1009-E	WIN MONDO SPREADING	S	30	170	33-54-57	118-08-04	LACFCO	10.32	10.35
1010	LITTLE ROCK CREEK ABOVE DAM	A	30	3280	34-28-41	118-01-24	LACFCO PERSONNEL	8.08	10.5
1011	GULF MOUNTAIN-LOOKOUT	S	21	3745	34-19-45	118-10-07	MR. REEDER	11.400	17.130
1012	SANTA SUSANA MTS. SALT CANYON	ST	29	2859	34-21-24	118-19-42	LACFCO PERSONNEL	12.62	16.72
1013	PAQUA HILLS PATROL STATION	S	29	1800	34-08-52	117-41-55	FIRE STATION PERSONNEL	15.47	17.30
1014	HASLEY CANYON-WESTERN GULF OIL CO.	S	29	1725	34-28-44	118-41-04	GULF OIL CO. PERSONNEL	11.10	13.05
1015	SANTA MARIA CREEK-SPRER	S	25	1415	34-07-44	118-30-42	WILLIAM SPER	10.42	16.60
1016	MALIBU BEACH-DUNNE	S	28	140	34-19-45	118-42-42	PHILIP DUNNE	6.58	10.12
1017	TUJUNGA-HILL CREEK SUMMIT	S	28	4970	34-23-25	118-04-50	ROAD DEPT PERSONNEL	16.250	17.150
1018	WELL CREEK SUMMIT R.S.	AP	28	1940	34-23-22	118-04-48	LACFCO	15.000	17.41
1019	MT. ISLIP-LITTLE JIMMY SPRINGS	ST	28	7520	34-20-50	117-44-57	LACFCO PERSONNEL	42.05	33.12
1020	MT. WATERMAN	ST	25	7060	34-20-23	117-50-21	LACFCO PERSONNEL	29.83	20.49
1021	SCLEMMER-REECE	S	9	1410	34-24-53	118-21-33	M. A. REECE	9.10	12.400
1022	WHITTIER-WOOD	S	27	205	33-59-52	118-03-17	WALTER J. WOOD	10.92	11.90
1023	ARCADIA-ARROGETUM	S	27	567	34-08-08	118-02-59	DAN MARTEL	15.19	14.82
1024	MT. PACIFIC	ST	27	6800	34-22-40	118-01-44	LACFCO PERSONNEL	18.78	17.26
1025	POTRERO CANYON-SUNRAY OR UEL CO.	S	26	1150	34-23-50	118-30-18	SUNRAY OR UEL CO. PERSONNEL	10.400	12.90
1026	SANTA ANITA CANYON-CHANNERY PLAT	AP	26	427	34-07-04	117-58-24	U.S.C.E. PERSONNEL	11.120	12.62
1027	LA CRESSENTA-CO. ROAD DEPT.	S	25	2175	34-11-00	118-01-23	LILA ADAMS	24.67	10.70
1028	OLD TOPANCA CANYON	S	22	1410	34-11-27	118-15-23	C. S. TURRILL	17.28	10.43
1029	CANOGA PARK-PIERCE COLLEGE	S	20	900	34-10-51	118-34-23	JAMES VERNON	8.80	13.44
1030	CAMP JOSEPH	SP	23	600	34-04-51	119-11-10	DONALD MATHEWS	10.71	16.70
1031-E	PALMDALE	SP AP	23	2540	34-15-17	119-09-31	IRRIGATION DISTRICT PERSONNEL	4.80	6.93
1032	SOUTH MT. HAWKINS	S	24	7100	34-18-46	117-48-32	LACFCO PERSONNEL	28.05	22.75
1033	LITTLE ROCK-STYCAMERE CAMP	A	24	4000	34-25-02	117-58-13	LACFCO PERSONNEL	11.5	42.4
1034	BUCKHORN PLAT	A	24	6700	34-20-44	117-55-08	LACFCO PERSONNEL	28.7	29.500
1035	SALDAD PASS	S	24	3520	34-29-35	118-05-28	J.C. JOHNSTON	9.61	10.90
1036	BATTLESNAKE CANYON-CAMP NO. 2	S	24	1200	34-05-40	118-51-35	L.A. CO. SHERIFF PERSONNEL	13.90	14.700
1037	MANHATTAN BEACH	S	24	182	33-53-00	118-23-19	JOSEPH PALMER	7.27	12.14
1038-E	DESCANSO GARDENS	S	24	1325	34-12-07	118-12-46	GARNER J. ENGEL	15.78	16.35
1039	LITTLE TUJUNGA RANGER STATION	SP A	24	2279	34-17-37	118-21-38	LACFCO PERSONNEL	27.58	14.46
1040	UPPER HOLPITELL CANYON	AP	22	3621	34-12-13	117-43-16	USFS PERSONNEL	21.14	17.300
1041	HUNTER CASTRO RANGER STATION	SP	23	3307	34-19-42	118-07-20	U.S.P.S. PERSONNEL	10.60	14.200
1042	MONTEVIA-FIVE POINTS	S	23	902	34-29-58	117-59-37	CITY PERSONNEL	17.71	17.90
1043	COVINA-GRIFITH	S	23	975	34-04-10	117-50-07	FLORIAN B. GRIFITH	17.60	15.21
1044	RUSIO DEBRIS BASIN	0.81"	22	1653	34-11-57	118-07-22	LACFCO PERSONNEL	14.94	15.69
1045	BRANFORD DEBRIS BASIN	A	22	935	34-09-23	117-57-58	LACFCO PERSONNEL	16.8	17.7
1046	DEER DEBRIS BASIN	0.81"	22	1200	34-11-33	118-14-28	LACFCO PERSONNEL	14.53	15.630
1047	GLENNDALE-GREGG	S	1	1350	34-11-45	118-14-37	ROBERT GREGG	9.10	INC.
1048	DUNSMITH DEBRIS BASIN	0.81"	23	2275	34-14-52	118-15-06	LACFCO PERSONNEL	INC.	DISC.
1049	TRUCKEE DEBRIS BASIN	0.81"	24	905	34-09-17	117-57-05	LACFCO PERSONNEL	12.15	16.36
1050	PAY DEBRIS BASIN	S	16	1402	33-51-28	118-25-05	LACFCO PERSONNEL	13.80	19.37
1051	TUMMILL DEBRIS BASIN	0.81"	23	495	33-59-19	118-01-30	LACFCO PERSONNEL	11.14	10.83
1052-E	GREEN VERDUGO PUMP PLANT	S	22	1340	34-15-25	118-20-11	D.W.P. PERSONNEL	12.00	15.60
1053	LA HABRA HEIGHTS MUTUAL WATER CO.	S	22	440	33-50-55	117-57-51	WATER CO. PERSONNEL	10.74	12.730
1054	LOS ALAMITOS	SP	40	25	33-48-35	118-04-35	L. HANRICK	7.94	10.62
1055	BUREAU PARK	SP AP	23	80	33-51-28	117-58-28	PUBLIC WORKS OFFICE PERSONNEL	9.20	10.70
1056	PULLERTON AIRPORT	SP AP	33	100	33-52-13	117-58-28	ORANGE COUNTY PERSONNEL	9.05	9.21
1057	ORANGE COUNTY RESERVOIR	SP AP	26	600	33-50-07	117-52-58	U.S.C.E. PERSONNEL	11.28	11.49
1058	WHITTIER-CATE	S	22	200	34-00-20	118-03-30	IRA D. CATE	10.88	11.36
1059	WHITTIER CANYON-SAN GABRIEL WEST FORK	ST	22	3165	34-17-02	117-59-40	LACFCO PERSONNEL	21.40	20.50
1060	ROJUELO CANYON AT TEXAS CANYON	S	22	1760	34-10-35	118-27-00	U.S.P.S. PERSONNEL	9.81	9.40
1061	PAIRMONT	SP	22	2854	34-04-23	118-27-15	D.S. PATTERSON	9.54	10.14
1062	LA TUNA CANYON	A	22	1160	34-11-13	118-14-37	LACFCO PERSONNEL	14.1	17.7
1063	ANNEVERDE VALLEY-PLATT	S	1	2044	34-14-28	118-11-53	RON IMBACH	12.67	INC.
1064	MT. BALDY	ST	22	4050	34-18-53	117-37-00	LACFCO PERSONNEL	37.38	23.62
1065	DEVIL'S PUMPHOUSE	S	17	740	34-26-48	117-41-20	JOHN SMITH	14.82	15.05
1066	QUINCY WATER CO.	SP AP	41	30	33-49-54	118-13-30	T.J. CLEMMER	7.02	12.43
1067	WHITTIER HARBOR DAM	S	21	239	34-11-29	118-03-02	U.S.C.E. PERSONNEL	10.68	10.400
1068	SAN ANTONIO DAM	0.81"AP	21	2120	34-09-24	117-40-25	U.S.C.E. PERSONNEL	16.79	17.18
1069	ATOPRA HEADON	ST	16	4324	34-01-18	118-10-16	LACFCO PERSONNEL	19.41	17.47
1070	DANFORTH SADDLE	ST	21	7700	34-22-08	117-40-10	LACFCO PERSONNEL	27.20	25.18
1071	BARTLEY PLAT	S	21	5524	34-10-49	118-00-40	L.A. CO. SHERIFF PERSONNEL	24.870	24.41
1072	COONS DEBRIS BASIN	0.81"	21	2107	34-14-49	118-15-40	LACFCO PERSONNEL	19.0100	19.28
1073	RED ROY CAP	S	23	4624	34-15-37	118-00-18	U.S.P.S. PERSONNEL	20.110	23.900
1074	LA PUENTE	0.81"	20	700	34-01-00	117-59-14	M.J. GARTER	10.51	DISC.
1075	LAPO-EAST FALLS	S	19	700	34-12-10	118-20-15	J. SHARPER	9.70	14.90
1076	WEST HARBOR	S	19	615	34-10-47	118-20-07	FIRE STATION PERSONNEL	10.90	16.6700
1077	WRIGHTWOOD FIRE STATION	S	20	5900	34-21-34	117-37-57	FIRE STATION PERSONNEL	27.40	16.49
1078	NICHOLAS CANYON	S	19	340	34-02-52	118-44-57	M.E. GORDON	9.70	11.20
1079	DAK PLAT GUARD STATION	S	19	2000	34-35-46	118-43-15	U.S.P.S. PERSONNEL	16.79	14.27
1080	PISH CANYON	ST	19	2600	34-12-23	117-50-43	LACFCO PERSONNEL	27.10	26.15
1081	LUNADA BAY	S	19	250	33-40-37	118-25-31	RONALD HARRIS	9.93	11.20
1082	STOUGH PARK	S	19	1100	34-12-17	118-18-15	LTLE GIESSE	12.15	17.04
1083	MT. DISAPPOINTMENT	A	18	5725	34-14-42	118-00-07	L.A.C.F.C.O.	31.07	23.9
1084	ROSEBUD	0.81"	17	105	34-07-57	118-03-35	FIRE STATION PERSONNEL	12.200	13.00
1085	UPLAND	SP	18	1805	34-07-57	117-18-18	LIBERTY GARDEN PERSONNEL	14.30	15.00
1086	SANTA ANITA CANYON-HELIPORT	S	18	2575	34-12-52	118-01-04	LOUIS LUBBERT	24.74	21.80
1087	EL CABALLERO COUNTRY CLUB	S	17	1000	34-08-52	118-31-53	E.G. BORDER	9.89	16.28
1088	SAN JOSE HILLS	S	17	440	34-03-00	117-44-43	HAROLD E. GAULDIN	9.84	13.83
1089	CLARK CREEK RANGER STATION	S	17	3625	34-18-15	118-03-11	U.S.P.S. PERSONNEL	25.46	20.30
1090	LAUREL	S	15	60	33-53-53	118-20-35	FIRE STATION PERSONNEL	INC.	DISC.
1091	CAL STATE UNIVERSITY AT NORTHRIDGE	A	15	800	34-11-17	118-11-40	DR. A. COURT	7.50	11.91
1092	TORRANCE MUNICIPAL AIRPORT	S	18	102	33-47-59	118-20-08	AIRPORT PERSONNEL	6.89	15.67

RAINFALL STATION LOCATION AND SEASONAL AMOUNT (CONTD.)

STA. NO.	STATION NAME	TYPE OF GAGE	YEARS OF RECORD	ELEV. OF GAGE	NORTH LAT.	WEST LONG.	OBSERVER	SEASONAL RAINFALL 1975-76	1976-77
1159	SHORTCUT CANYON-WEST FORK	A	11	6624	36-15-39	119-00-08	LACPCD PERSONNEL	28.9	25.9
1160	SAN GABRIEL CANYON WEST FORK HELIPORT	A	13	3220	36-15-02	119-01-10	LACPCD PERSONNEL	26.0	23.1
1162	IRON MOUNTAIN	ST	14	5127	36-21-06	119-01-30	LACPCD PERSONNEL	42.41	19.44
1166B	WILE HIGH RANCH	S	5		36-20-07	117-00-14	JAMES C. BERRY	13.0000	15.710
1167	PENNER CANYON	S	12	5387	36-23-24	117-00-27	PROBATION DEPT. PERSONNEL	14.2000	16.50
1169B	LAKE PIRU	SP	23	1149	36-20-22	119-05-21	FRANK C. BELMETH	17.40	13.93
1170B	THOUSAND OAKS WEATHER STATION	A	21	905	36-10-00	119-01-01	VENTURA COUNTY FLOOD CONTROL	9.03	11.99
1171B	CAMULUS RANCH	SA	21	729	36-20-27	119-05-21	JACK HARRING	9.95	13.32
1172	PIRU CANYON ABOVE PIRU LAKE	AP	21	1150	36-30-00	119-05-26	FRANK C. BELMETH	9.75	16.36
1173A	TAPO CANYON	AP	16	1524	36-12-56	119-02-41	SOIL CON. PERSONNEL	11.35	12.00
1177B	LAKE BARD	A	11	1917	36-10-32	119-00-01	A.L. ALVAR	6.91	9.17
1183B	LA HABRA FIRE STATION	SP	40	315	37-05-33	117-57-17	FIRE STATION PERSONNEL	9.95	11.00
1184	SAN FRANCISCO CANYON CAMP 4	S	9	1840	36-13-55	119-00-28	WILLIAM TRIM	9.0000	12.15
1187	HILLARD-CAMP SIERRA	STP	6	2740	36-13-04	119-07-58	U.S.F.S. PERSONNEL	21.29	17.33
1188	EATON-HARRMAN SADDLE	SP	6	5067	36-10-31	119-05-38	U.S.F.S. PERSONNEL	17.80	16.17
1189	PAJUNO CANYON NORTH FORK RANGER STATION	SA	8	4187	36-23-17	119-15-00	USFS PERSONNEL	17.30	15.91
1191	BEAR-DIVIDE USFS STATION	S	7	2700	36-21-35	119-23-37	USFS PERSONNEL	21.42	20.73
1192	CARSON RIF. STATION	0-41"	4	92	33-32-06	119-15-00	FIRE STATION PERSONNEL	7.93	9.41
1193	WESTLAKE VILLAGE	S	4	985	36-30-10	119-00-35	FIRE STATION PERSONNEL	9.99	12.300
1194	SANTA YNEZ RESERVOIR	S	10	735	36-20-27	119-33-59	D.W.P. PERSONNEL	9.94	13.51
1195	CHINO FIRE STATION #2	SP	22	855	33-30-00	117-03-20	S.B.C.F.C.D.	9.95	15.36
1196	PORTCLAIR FIRE DEPARTMENT	S	20	905	36-03-01	117-01-15	S.B.C.F.C.D.	11.07	15.50
1197	CAJON WEST SUMMIT	AP	34	4438	36-23-00	117-15-00	S.B.C.F.C.D.	12.90	11.5
1198	PHILAN FIRE CONTROL	SP	20	4100	36-25-37	117-34-00	S.B.C.F.C.D.	9.29	7.380
1199	CLOUDCROFT DEBRIS BASIN	A	4	750	36-22-58	119-34-12	LACPCD PERSONNEL	8.7	10.7
1201	HIDDEN HILLS	S	2	1135	36-10-00	119-03-03	COLLEEN HARTMAN	9.91	16.100
1202	CAMP CISQUITO	S	2	2840	36-30-58	119-20-17	LEWIS WARD	15.52	16.310
1203	LITTLE TUJUNGA-ALOPA CREEK	ST	2	2825	36-20-15	119-18-50	LACPCD	23.12	19.44
1204-E	ACTON SCHOOL	S	2	2760	36-20-23	119-11-00	STUDENTS	7.500	INC.
1205	WOODY SPRING	ST	2	2914	36-36-04	117-00-23	LACPCD	3.57	4.01
1206	MUROC	ST	2	2319	36-00-26	117-05-03	LACPCD	2.05	INC.
1207	ROSAMOND WEST	ST	2	2340	36-00-14	119-11-34	LACPCD	3.28	INC.
1208	LA CRESCENTA-VRGITH	S	1	1707	36-10-30	119-15-29	CHUCK VERGITH	4.11	INC.
1212	LANCASTER PSS/RAA	S	3	2540	36-00	119-13	PERT. OF TRANSPORTATION	4.09	4.01
1219	MT. VISTA	S	20	3287	36-00-31	117-00-03	MARY SCHAEFFER	4.76	4.38
1210	COOBS CANYON	SP	21	3405	36-15-52	119-15-11	T. ARNOT	16.45	16.31
1218	DUYMORE CANYON-UPPER	SP	21	3290	36-15-39	119-13-07	T. ARNOT	20.00	17.17
122	ISLIP SADDLE	ST	20	6982	36-21-27	117-01-05	LACPCD PERSONNEL	29.6000	29.70
123	TORE CANYON	ST	20	7380	36-22-16	117-00-51	LACPCD PERSONNEL	21.75	20.77
124	GRASSY HOLLOW	ST	20	7360	36-22-37	117-00-05	LACPCD PERSONNEL	16.07	15.07
125	BEAR GULCH	ST	20	7880	36-21-58	117-01-27	LACPCD PERSONNEL	22.01	19.31
126	BLUE RIDGE	ST	20	4450	36-23-57	117-00-27	LACPCD PERSONNEL	15.04	12.31
127	GURRY'S CAMP	ST	20	8780	36-20-27	117-10-55	LACPCD PERSONNEL	18.53	15.07
128B	HOLIDAY HILL	A	20	8130	36-21-29	117-00-50	LACPCD PERSONNEL	21.7	16.0
133	EAGLE DEBRIS BASIN	0-41"	13	1940	36-10-07	119-14-12	LACPCD PERSONNEL	15.200	16.120
142B	MORAN DEBRIS BASIN	S	9	1230	36-23-15	117-00-37	LACPCD PERSONNEL	9.6700	10.20
143	HARLOW DEBRIS BASIN	0-41"	9	1275	36-29-24	117-01-00	LACPCD PERSONNEL	13.4000	7.0
144	ENGLEWILD DEBRIS BASIN	0-41"	4	1310	36-29-24	117-02-08	LACPCD PERSONNEL	16.1100	2150.

LEGEND REGARDING GAGE TYPE, OWNERSHIP, AND RAINFALL AMOUNTS

S	STANDARD 8" DIA. NON-RECORDING GAGE OWNED BY FLOOD CONTROL DIST.
A	AUTOMATIC RECORDING GAGE OWNED BY FLOOD CONTROL DISTRICT
ST	STORAGE TYPE GAGE OWNED BY FLOOD CONTROL DISTRICT
0-41"	4.41" DIAMETER NON-RECORDING GAGE OWNED BY FLOOD CONTROL DISTRICT
3"	3" DIAMETER NON-RECORDING GAGE OWNED BY OUTSIDE INTERESTS
4 1/2"	4 1/2" DIAMETER NON-RECORDING GAGE OWNED BY OUTSIDE INTERESTS
SP	8" DIAMETER NON-RECORDING GAGE OWNED BY OUTSIDE INTERESTS
AP	AUTOMATIC RECORDING GAGE OWNED BY OUTSIDE INTERESTS
SUPPLY & OR C	DENOTES SECOND OR THIRD LOCATION OF STATION IN SAME AREA
SUPPLY & E	DENOTES EVAPORATION PAN AT STATION
+	ESTIMATED GREATER THAN 10% OF TOTAL
-	ESTIMATED LESS THAN 10% OF TOTAL
INC.	INCOMPLETE RECORD
N.I.	NOT INSTALLED
N.R.	NO RECORD
DISC.	STATION DISCONTINUED

4. Typical Precipitation Data Sheets, Los Angeles County
Department of Public Works. Courtesy of Don Carpenter.
(Includes typical chart from recording gages)

SEASONAL PRECIPITATION BY DAY 1982 - 1983

STATION NO. 610B

Pasadena - City Hall

LATITUDE 34 ° 08 ' 54 "

LONGITUDE 118 ° 08 ' 36 "

ELEVATION 864 '

OBSERVATION TIME 5 AM/PM

LENGTH OF
RECORD

REMARKS/CERTIFICATION:

SUBAREA CODE

FOREIGN NO.

QUAD INDEX NO. 40-55



DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
1						3.95		.13	.05			
2					.39	4.14		.13				
3					.63	.66						
4						.04						
5					.21		.09					
6					T	.08						
7					.22	.02				T		
8			.01		.60							
9		1.40	.02									
10		1.36	.01									
11							.03		.03			
12												
13					.05	.02						
14						.56					.02	
15											.30	
16											T	
17						.45	T				.42	
18						.18	2.12				.14	
19		.73		.88		.15	.06				1.04	
20							2.36				T	.20
21						1.03	.67					
22			.98	.35		.02						T
23		T	.49	2.12		.18						
24				1.03	.07	.95	T					
25				.01	.19							
26	.38				.83							.10
27				2.95	1.40							T
28					1.60	.17	.05					
29		.21	.04	1.52			1.70					.27
30	.07	3.18	.04				.69					1.61
31								.03				
TOTAL	✓ 4.45	6.80	1.59	8.86	6.19	12.60	7.77	.29	.08	Φ	1.92	2.18

LACFCD

SEASON TOTAL 48.73 INCHES

SEASONAL PRECIPITATION BY DAY 1977 - 1978STATION NO. 491C

Pacific Palisades

LATITUDE 34 ° 02 ' 22 "

LONGITUDE 118 ° 31 ' 43 "

ELEVATION 293 '

OBSERVATION TIME 5  /PMLENGTH OF
RECORD

REMARKS/CERTIFICATION:

SUBAREA CODE A7

FOREIGN NO.

QUAD INDEX NO. 24-65



DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
1						1.88	.22					
2						1.79						
3				.25		.91						
4				1.33		3.20	.13					
5		.25			1.78	.72						.53
6				.65	.35							.13
7				.03	.83		.22					
8					.19					T	T	
9				1.72	1.98	.20				T		
10				.33	.75							
11						T						
12					1.45	.12						
13					1.46		T					
14				.58								
15				1.14			.62					
16				1.18			.20					
17			.20	.67								
18			.20	T								
19	T			.63								
20												
21			.05			.28						
22						1.02						
23												
24												
25							.27					
26			.85									
27			1.0		1.43							
28			2.25		1.80	T						
29			.89			.08						
30						.31						
31						.86						
TOTAL	T	.25	5.42	8.51	12.02	11.37	1.66	0	0	0	T	.66

LACFD

2979 FCO 7-77

SEASON TOTAL 39.89 INCHES

TABULATION OF PERIODS OF MAXIMUM RAINFALL FOR STORMS HAVING A TOTAL OF -.5 INCHES OR OVER

STATION NAME LOS ANGELES-DICOMMUN STATION NO. 716 DATE INSTALLED _____ K Zone

Date		5 Min.	10 Min.	15 Min.	30 Min.	1 Hr.	2 Hrs.	3 Hrs.	4 Hrs.	5 Hrs.	12 Hrs.	24 Hrs.	Storm Total
DEC	Amt.	.1	.2	.3	.3	.4	.8	1.1	1.3	1.4	1.8	2.2	A. 4.0
25-29	Time	10 ³¹ A	10 ³⁸ A	10 ³⁸ A	10 ³⁸ A	9 ⁵³ A	7 ⁴³ A	8 ⁰³ A	6 ⁵³ A	5 ⁵³ A	12 MUNT	2 ¹⁸ P	S.
1977	Date	28	28	28	28	28	28	28	28	28	27	27	

STORM DURATION 6:00 P on 12-25 to 10:00 A on 12-29

Remarks

JAN	Amt.	.1	.2	.3	.6	.7	.7	1.2	1.3	1.3	1.3	1.3	A. 1.9
4-6	Time	11:20 A	11:20 A	11:20 A	11:20 A	2:20 P	2:20 P	11:20 A	11:20 A	11:20 A	11:20 A	11:20 A	S.
1978	Date	4	4	4	4	4	4	4	4	4	4	4	

STORM DURATION 11:20 A on 1-4 to 12:35 P on 1-6

Remarks

JAN	Amt.	.2	.2	.3	.4	.4	.4	.6	.7	.9	1.4	1.4	A. 1.7
9-10	Time	5:25 A	5:25 A	5:25 A	5:25 A	5:25 A	5:25 A	5:25 A	11:35 A	5:25 A	11:35 A	11:35 A	S.
1978	Date	10	10	10	10	10	10	10	9	10	9	9	

STORM DURATION 11:35 A on 1-9 to 4:45 P on 1-10

Remarks

FEB	Amt.	.1	.1	.2	.3	.6	.9	1.0	1.3	2.0	2.3	2.3	A. 3.7
8-10	Time	1:45 A	1:45 A	1:40 A	1:40 A	1:25 A	1:40 A	11:35 P	9:40 P	2:40 P	10:30 A	10:30 A	S.
1978	Date	9	9	9	9	9	89	8	8	8	8	8	

STORM DURATION 4:40 P on 2-8 to 6:10 A on 2-10

Remarks

FEB 27-	Amt.	.2	.3	.4	.5	.6	.9	1.2	1.3	1.4	2.4	3.8	A. 8.5
MAR 5	Time	0:10 A	0:05 A	0:05 A	11:50 P	7:15 A	0:25 A	12 MUNT	12 MUNT	10:55 P	2:35 P	11:35 A	S.
1978	Date	5	5	5	4	4	1	2-20	2-20	2-20	2-20	2-27	

STORM DURATION 2:20 A on 2-27 to 2:40 A on 3-5

Remarks

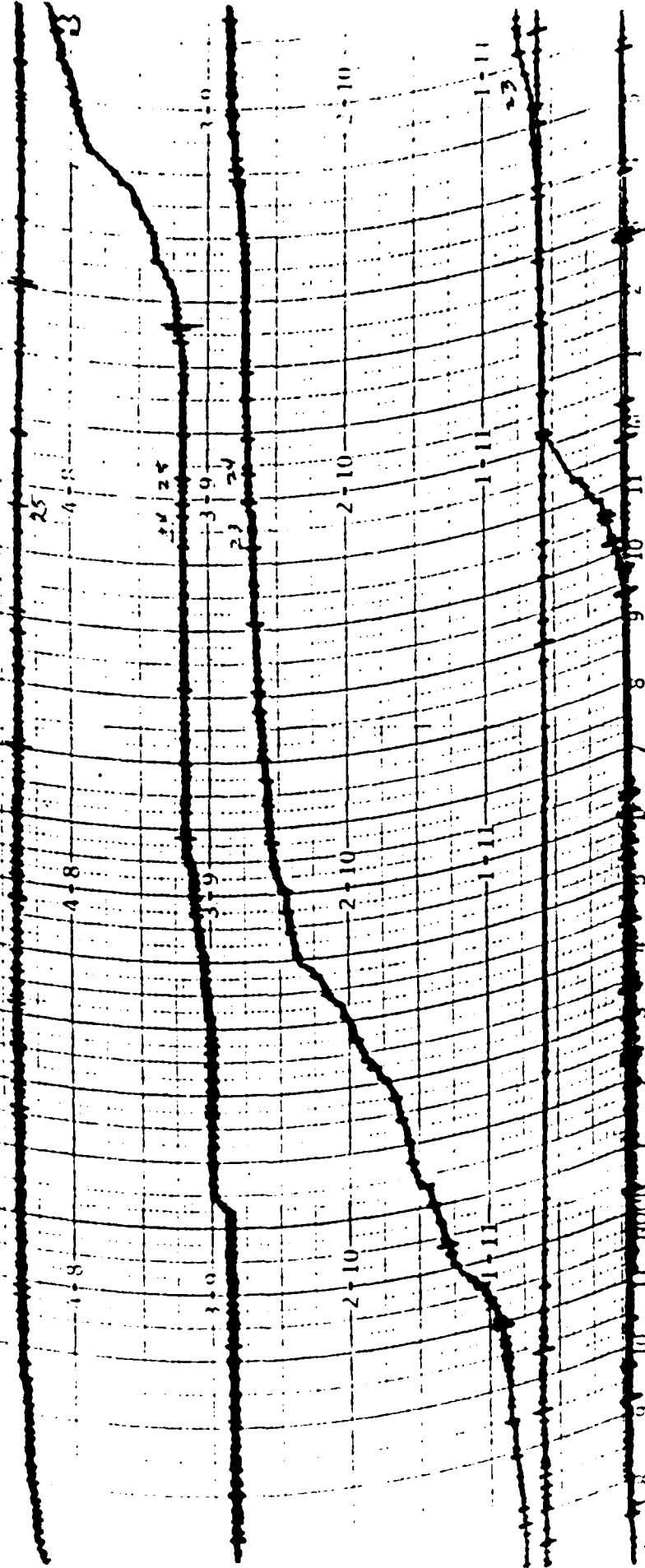
NOTE: Time shown is beginning of period indicated.

A: Indicates recording rain gage amount.

S: Indicates Standard rain gage amount.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT					
STA. NO.	716	DATE	11/19/59	EXACT TIME TO MIN.	INITIAL
CHART PUT ON	11:19 AM		7:25 AM	PM	JF, RB
CHART REMOVED	1:50 PM		7:25 AM	PM	JF, RB
STANDARD GAGE ANT.	514.49				
AUTO. MEAS. IN STD.	4/95				

OFF



5. Index of precipitation gages, Riverside County, with cross-reference and location maps. Courtesy of Kathy Carter, Riverside County Flood Control and Water Conservation District.

RAINFALL STATION INDEX

STATION NAME	STATION NO.	LATITUDE	LONGITUDE	ELEV	EQUIPMENT	TYPE	FIRST YEAR	OWNER	OPERATOR
* Discontinued									
AGUANGA PRADEFCRC	RS/ 2E-08P01	33-25-12	116-48-10	3180	8 STD		1922	RCFC&WCD	R BRADFORD
AGUANGA VALLEY	RS/ 1E-28P01	33-26-40	116-52-47	1920	8 AUTO		1940	RCFC&WCD	RCFC&WCD
AGUANGA-THOMSEN	RS/ 1E-34P01	33-26-09	116-51-40	1986	8 STD		19030	NKS	PAUL THOMSEN
ALANDALE	4S/ 2E-34P01	33-46-53	116-45-15	5900	12 AUTO A		1986	RCFC&WCD	RCFC&WCD
ANGELES HILL	4S/ 1E-23P01	33-48-26	116-51-08	3920	8 STOR		1979	RCFC&WCD	RCFC&WCD
ANZA SDF	7S/ 3E-16P01	33-33-18	116-40-22	3915	8 STD & AUTO		1943	RCFC&WCD	SDF & RCFC&WCD
ANZA-CARTIER	7S/ 3E-04P01	33-35-25	116-40-10	4550			19500	PRIVATE	CARTIER
ARLINGTON	3S/ 5W-08P01	33-55-01	117-26-31	905	4 PLAS		1963	RCFC&WCD	RUSD FIRE DEPT
ARLINGTON HEIGHTS	3S/ 5W-30P01	33-53-18	117-26-55	920	8 STD		19230	HEASLET GROVE	F S HEASLET
BANNING	3S/ 1E-16P01	33-55-20	116-52-32	2305	8 STD		19340	WWD	WWD
BANNING BENCH	2S/ 1E-30P01	33-58-26	116-54-41	3500	8 STD		19750	USFS	USFS
BANNING BENCH NO.2	2S/ 1E-17P01	33-59-56	116-54-34	4000	8 AUTO		1976	RCFC&WCD	RCFC&WCD
BANNING WATER CO	3S/ 1E-09P01	33-55-17	116-52-26	2296	8 STD		1879	BANNING WATER	BANNING WATER
BEAUMONT	3S/ 1W-10P01	33-55-44	116-58-27	2613	8 AUTO		1888	NKS	RCFC&WCD
BEAUMONT 1E	3S/ 1W-11P01	33-55-45	116-58-03	2603	8 STD		1942	NKS	MR. PHILLIPS
BEAUMONT NEAR	3S/ 1W-19P01	33-54-00	117-02-00	2560			18750	RING & MURRAY	RING & MURRAY
BEAUMONT PUMP PLAT	2S/ 1W-22P01	33-59-06	116-58-05	3045	8 STD		19110	NKS	B-CV MTR DIST
BEAUMONT SDF	3S/ 1W-11P02	33-55-47	116-57-00	2600	4 PLAS		1957	RCFC&WCD	SDF
BERDOO CAMP	4S/ 6E-16P01	33-49-50	116-08-50	1875	8 STD		19340	NKS	WWD
BERMUDA DUNES SDF	5S/ 7E-07P01	33-44-38	116-17-15	100	4 PLAS		1954	RCFC&WCD	SDF
BLACK MTN-YMCA	4S/ 2E-01P01	33-50-50	116-43-17	6720	8 STOR		1978	RCFC&WCD	RCFC&WCD
BLYTHE AIRBASE SDF	6S/ 2SE-31P01	33-36-50	114-42-50	390	8 STD & AUTO		1940	NKS	SDF
BLYTHE SDF	6S/ 2SE-32P01	33-36-49	114-35-47	267	8 STD		1909	NKS	SDF
BOX SPRINGS VTR	2S/ 4W-27P01	33-57-43	117-15-47	3080	8 STD		19510	RUSD C COMM DP	L H CLARAUGH
BUNDY CANYON RD	6S/ 3W-20P01	33-38-26	117-12-51	1790	4 PLAS		19660	RCFC&WCD	R FRANCISCO
CABAZON	3S/ 2E-16P01	33-55-02	116-47-03	1920	8 AUTO		1898	RCFC&WCD	RCFC&WCD
CABAZON SDF	3S/ 2E-16P02	33-54-33	116-45-52	1700	8 STD		1984	RCFC&WCD	SDF
CABAZON SHAFT	3S/ 2E-20P01	33-53-38	116-47-30	1800			19380	WWD	M R COONE
CAMUILLA	7S/ 3E-31P01	33-32-30	116-44-36	3635	8 STD		19110	NKS	W L SHANK
CAJALCO #2	4S/ 5W-12P02	33-50-27	117-21-31	1530	8 STD		19340	WWD	WWD
CAJALCO SDF	4S/ 5W-12P01	33-50-06	117-21-02	1520	4 PLAS		1956	RCFC&WCD	SDF
CALIMESA SDF	2S/ 2W-13P01	34-00-13	117-03-29	2400	8 STD		1958	RCFC&WCD	SDF
CAMP SCHERMAN	6S/ 4E-17P01	33-38-50	116-35-40	5350	8 STD & AUTO A		1977	RCFC&WCD	H FRIEDMAN
CATHEDRAL CITY RD	4S/ 5E-33P03	33-47-00	116-27-57	295	8 AUTO		1969	RCFC&WCD	RCFC&WCD
CATHEDRAL CITY SDF	4S/ 5E-33P01	33-46-49	116-27-27	284	8 STD		1949	RCFC&WCD	SDF
CHASE & TAYLOR	4S/ 7W-02P02	33-50-37	117-34-32	1055	8 STD & AUTO		1930	RCFC&WCD	CLC/RCFC&WCD
CHEPPY VALLEY SDF	2S/ 1W-22P02	33-54-32	116-58-20	2860	4 PLAS		1911	RCFC&WCD	SDF
CHEPPY VALLEY-LEE	2S/ 1W-27P01	33-54-19	116-58-24	2820	3 STD		19560	RCFC&WCD	RICHARD LEE
CORONA BARNER E 17	4S/ 7W-12P02	33-48-57	117-33-32	1220	3 STD		19350		A C HARNES
CORONA FIRE DEPT	3S/ 7W-25P03	33-53-05	117-33-45	593	8 STD		1989	NKS	CORONA FIRE DP
CORONA FLC#4	4S/ 5W-05P01	33-53-45	117-32-08	890			19320	CORONA LEM CO	CORONA LEM CO
CORONA FLC#5	3S/ 7W-35P01	33-52-25	117-35-05	725			19370	CORONA LEM CO	CORONA LEM CO
CORONA FLC#6A	3S/ 7W-36P01	33-51-55	117-34-02	730			19410	CORONA LEM CO	CORONA LEM CO
CORONA JARVIS	4S/ 7W-31P01	33-51-13	117-33-11	900			19410		MR BLACKMAN

RAINFALL STATION INDEX

STATION NAME	STATION NO.	LATITUDE	LONGITUDE	ELEV.	EQUIPMENT	TYPE	FIRST YEAR	OWNER	OPERATOR
CORONA AFR	35/ 6W-30P01	33-52-30	117-32-57	540	9	AUTO	19400	USDA	USFS
CORONA SDF	35/ 7W-13P01	33-54-07	117-33-40	638	4	PLAS	1951	RCFC&MCO	SDF
CORONA SIAS	45/ 7W-02P01	33-53-39	117-33-23	1020			19120	THOMAS SIAS	THOMAS SIAS
CORONA SOUTH	45/ 6W-07P01	33-50-15	117-32-42	1070	2	MAN	1912	CIT. ORCH. SERVICE	C. BELL
COTTONWOOD WASH	45/ 11E-10P01	33-44-40	115-42-35	3100	8	AUTO	19610	USGS	USGS
COVINGTON FLAT	25/ 4E-12P01	34-00-20	116-19-00	5000	8	STOR	1982	RCFC&MCO	RCFC&MCO
COYOTE CANYON	85/ 5E-31P01	33-26-05	116-30-05	2275		STOP	19450	NWS	HOWARD RAILLEY
CRESTMORE	25/ 5W-03P01	34-01-47	117-23-38	1030	8	STO	19430	SRCFCD	A K SMITH
DANSON CANYON	45/ 6W-35P01	33-45-00	117-28-00	980			18800		
DECKERS RANCH	45/ 2E-26P02	33-48-00	116-45-00	5550	8	STO	19210	NWS	I W DECKER
DEEP CANYON AGAVE	65/ 6E-19P01	33-30-23	116-23-50	2750	4	PLAS	1973	RCFC&MCO/UC	UC
DEEP CANYON LAB	65/ 6E-17P01	33-33-52	116-22-34	1000	8	STO & AUTO	1963	NWS & UC	RFSEARCH CTR
DELUZ	85/ 4W-29P02	33-27-04	117-19-29	440	4	PLAS	1903	RCFC&MCO	FELIX GARNISAY
DESERT CENTER	55/ 16E-05P01	33-46-15	115-20-20	537	8	STO	1967	CHARLENE CARNEY	OWNER
DESERT HOT SPR. SDF	25/ 5E-30P01	33-51-43	116-30-35	1080	8	STO	1949	RCFC&MCO	SDF
DESERT HOT SPR. W. C	25/ 5E-30P02	33-58-03	116-29-40	1220	8	AUTO	1965	RCFC&MCO	RCFC&MCO
DESERT WTR AGENCY	45/ 5E-19P01	33-48-18	116-29-43	353	4	PLAS	1979	RCFC&MCO	DWA
EAGLE MOUNTAIN	45/ 15E-19P01	33-48-40	115-27-00	973	8	STO	1933	MWD	MWD & NWS
EAGLE VALLEY	35/ 6W-35P01	33-33-38	117-24-59	1365	3	STO	1964	CORONA LEM CO.	CORONA LEM CO.
EDGEMONT CDF	35/ 4W-11P01	33-55-27	117-15-32	1555	4	PLAS	1966	RCFC&MCO	SDF
EL CAPIOSO STATION	65/ 5W-16P01	33-39-00	117-24-43	2660	8	STO & AUTO	1966	RCFC&MCO	RCFC&MCO
EL CERRATO SDF	45/ 6W-16P01	33-49-29	117-30-33	800	4	PLAS	1963	RCFC&MCO	SDF
ELCINORE PRAY	65/ 5W-11P01	33-40-15	117-19-16	1312	4	PLAS	19780	RCFC&MCO	BONNIE PRAY
ELCINORE ACE	65/ 4W-23P01	33-38-00	117-16-00	1450	8	AUTO	19410	NWS	P M ALBRIGHT
ELCINORE 45SE	65/ 4W-28P01	33-37-08	117-18-37	1305	8	AUTO	19570	NWS	J L EWING
ELCINORE SDF	65/ 4W-07P01	33-40-07	117-19-50	1285	8	STO & AUTO	1987	SDF & NWS	SDF & RCFC&MCO
ELCINORE ST PARK	65/ 5W-02P01	33-40-32	117-22-21	1265	4	PLAS	1966	RCFC&MCO	STATE PARKS
ELSINORE-SHERMAN	55/ 5W-35P01	33-41-11	117-23-07	1372	8	STO	19170	E M SHERMAN	E M SHERMAN
GAVILAN HILLS	45/ 4W-30P01	33-47-34	117-20-20	2150			19190	MWD	R E JAMES
GAVILAN SPRINGS	45/ 5W-33P01	33-47-30	117-23-47	2050	8	AUTO A	1978	RCFC&MCO	RCFC&MCO
GILMAN HOTSPRINGS	45/ 1W-09P01	33-50-00	116-59-17	1470	8	STO	19440	RCFC&MCO	LEO JOHNSON
GLEN AVON	25/ 6W-02P01	34-00-44	117-29-11	750			19280	USDA	J B FREYDOZ
GLEN AVON CDF	25/ 6W-10P01	34-00-43	117-29-37	745	4	PLAS	1962	RCFC&MCO	SDF
GLEN IVY	55/ 6W-03P01	33-45-54	117-28-10	1100	8	MAN	1905	TEMESCAL WATER	TEMESCAL WATER
GODD HOPE	45/ 4W-33P01	33-46-20	117-17-43	1780	3	STO	1978	RCFC&MCO	MARTHA GRAHAM
GRN RIVER GOLF C	35/ 8W-36P01	33-52-23	117-40-17	450	9	STO	1970	OCFCD	GOLF COURSE
HAGADOR PIDGE	45/ 7W-10P01	33-50-07	117-35-59	1200	8	AUTO	19780	USFS	USFS
HARRISON APS #2	35/ 5W-32P02	33-52-11	117-25-51	1184	9	STO & AUTO	19650	USARS	USARS
HARRISON DAM	35/ 5W-32P01	33-53-14	117-25-04	1275	8	AUTO	1962	RCFC&MCO	RCFC&MCO
PLAYFIELD PUMP PLANT	55/ 13E-28P01	33-42-30	115-39-07	1370	9	STO & AUTO	1935	MWD	MWD & NWS
HAYSTACK-WMT	55/ 5E-29P01	33-42-08	116-28-44	2800	8	AUTO	1980	RCFC&MCO	RCFC&MCO
HEMET	55/ 1W-11P01	33-44-53	115-55-43	1560	8	STO	1911	NWS	LAKE HEMET MWD
HEMET RESERVOIR	65/ 3E-09P01	33-40-07	115-40-33	4355	8	STO	1987	LAKE HEMET WTR	CECILE HEACH
HENDRICKS RANCH	35/ 3W-14P01	33-55-00	117-10-00	1750			19240	MORENO MUT WTR	O W SCOTT
HIGHBORNE SDF	25/ 4W-07P01	34-01-55	117-19-48	962	4	PLAS	1966	RCFC&MCO	SDF

RAINFALL STATION INDEX

STATION NAME	STATION NO.	LATITUDE	LONGITUDE	ELEV.	EQUIPMENT TYPE	FIRST YEAR	OWNER	OPERATOR
HIGHGROVE STEAM PL	2S/ 4W-06P01	34-01-27	117-19-50	945	8 AUTO	1961	SHCFCD	RCFC&MCD
HOMELAND	5S/ 2W-17P01	33-45-23	117-07-45	1640	4 PLAS	1962	RCFC&MCD	S MILLER
HORSE CANYON	6S/ 4E-14P01	33-28-00	116-33-00	2900	STD	19430	USCE	USCE
HOWELL RANCH	7S/ 4W-03P01	33-15-41	117-15-47	1300	4 PLAS	19660	MELLIE HOWELL	OWNER
HUMBER PARK FUND	5S/ 3E-05P01	33-45-50	116-41-15	6320	8 STOP	1980	RCFC&MCD	RCFC&MCD
HURKEY CREEK PARK	6S/ 3E-04P01	33-40-32	116-40-47	4390	8 AUTO	1962	NWS	RCFC&MCD
IOYLLA WILD FIRE CPT	5S/ 3E-07P01	33-44-50	116-40-55	5397	8 STD & AUTO	1961	NWS	IOYLLA WILD F D
INDIAN WELLS	5S/ 6E-23P01	33-43-20	116-20-13	144	4 PLAS	1944	RCFC&MCD	SDF
INICIO DATE GARDEN	5S/ 7E-22P01	33-43-38	116-19-39	11	8 STD	19780	NWS	US DATE-C STA
INDIO HILLS MORLEY	4S/ 7E-11P01	33-50-05	116-13-45	1160	8 AUTO	1978	RCFC&MCD	RCFC&MCD
INDIO SDF	5S/ 7E-26P01	33-42-47	116-11-24	8	4 PLAS	1978	RCFC&MCD	SDF
JOSHUA TREE 5000	3S/ 8E-07P01	33-55-47	116-10-30	5040	8 STOP	1981	RCFC&MCD	RCFC&MCD
JOSHUA TREE L S PS	2S/ 8E-07P01	34-01-09	116-11-24	4200	8 AUTO	1969	RCFC&MCD	RCFC&MCD
JUNIPER FLATS	5S/ 2W-03P01	33-45-49	117-04-57	2110	4 PLAS & AUTO A	1964	RCFC&MCD	EILEEN BANKS
JURUPA RUTILE	2S/ 6W-22P01	33-59-23	117-29-46	708	4 PLAS	1983	RCFC&MCD	DON TRACY
LA CRESTA	7S/ 4W-17P01	33-33-23	117-19-39	2200	8 AUTO	1980	RCFC&MCD	RCFC&MCD
LA QUINTA SDF	6S/ 7E-06P01	33-40-25	116-17-50	85	4 PLAS	1953	RCFC&MCD	SDF
LA SIERRA FIRE STA	3S/ 6W-10P01	33-55-07	117-20-12	712	4 PLAS	1956	RCFC&MCD	RVSD FIRE DEPT
LA SIERRA RANCH	5S/ 1W-20P01	33-45-00	117-00-00	1550		19150		I E FARRAR
LAKE MATHEWS	4S/ 6W-01P01	33-51-07	117-25-47	1447	8 STD	1939	WWD	WWD
LAKE MATHEWS IS #1	4S/ 5W-07P01	33-50-33	117-25-47	1390	8 STD	19470	WWD	WWD
LAKE MATHEWS SH #2	4S/ 5W-10P01	33-50-00	117-23-00	1400		19450	WWD	WWD
LAKELAND VILL SDF	6S/ 5W-13P01	33-38-13	117-20-44	1319	4 PLAS	1956	RCFC&MCD	SDF
LAKEVIEW	4S/ 2W-08P01	33-50-00	117-07-00	1458		19100		J WCDKNOUGH
LAWLOR CO PARK	4S/ 2E-26P01	33-47-40	116-44-41	5290	8 STD	1975	RCFC&MCD	RVSD CO PARKS
LAWRENCE ADIT	3S/ 1E-28P01	33-53-08	116-53-34	2640		19380	WWD	W R CONNS
LITTLE LAKE SDF	5S/ 1W-13P01	33-44-42	116-55-53	1695	8 STD	1960	RCFC&MCD	SDF
LOS ALAMOS GREENWD	7S/ 2W-15P01	33-34-01	117-04-28	1440		19120	W R GREENWOOD	W R GREENWOOD
LOS ALAMOS VALLEY	7S/ 2W-12P01	33-35-00	117-01-50	1480		19530		
LOWER RANCH	3S/ 7W-34P01	33-51-40	117-35-37	960	5 MAN	19330	CORONA LEW CO	CORONA LEW CO
MARCH AFB	3S/ 4W-25P01	33-52-00	117-15-00	1485	8 AUTO	19300	USAF	USAF
MECCA SDF	7S/ 9E-08P01	33-34-20	116-04-37	190	8 STD	1906	RCFC&MCD	SDF
MILKY SPRINGS	6S/ 2E-10P01	33-39-40	116-45-35	4540	8 STOP	1979	RCFC&MCD	RCFC&MCD
MILLARD CANYON	2S/ 2E-16P02	33-59-00	116-47-16	3740	8 AUTO	1980	RCFC&MCD	RCFC&MCD
MILLARD CANYON	2S/ 2E-12P01	33-57-05	116-43-03	2600		19200	NWS	NWS
MILLARD CYN-RODGE	2S/ 2E-16P01	33-59-30	116-47-05	3590	4 PLAS	19780	RCFC&MCD	EDNA BODGER
MILLARD FORKS	2S/ 2E-21P01	33-59-15	116-47-09	3590		19200	NWS	NWS
MIRA LOMA SPACE C	2S/ 6W-05P01	34-01-27	117-31-47	827	8 AUTO	1909	SHCFCD	SHCFCD
MISSION CREEK	2S/ 3E-12P01	34-00-55	116-37-38	2420	8 STD	1968	DITZ-CRANE	D PRICE
MOCKINGBIRD RESERV	3S/ 5W-01P01	33-53-44	117-24-54	1112	8 STD	1939	GAGE CANAL CO	GAGE CANAL CO
MORENO VALLEY	3S/ 2W-06P01	33-56-27	117-08-14	1840	8 AUTO	1922	RCFC&MCD	RCFC&MCD
MORENO VALLEY	1S/ 4E-28P01	34-04-14	116-32-15	2765	8 STD & AUTO	1942	SHCFCD	C MCPEARLAND
MT SAN JACINTO WSP	4S/ 3E-23P01	33-48-40	116-30-23	9417	8 STD & AUTO	1966	RCFC&MCD	STATE PARKS
MURCELL BEACH	7S/ 2E-27P01	33-32-00	116-45-00	3705	8 STD	19430	NWS	USCE
MURRIETA BEACH	7S/ 3W-16P01	33-33-17	117-10-13	1110		19530	DWR	DWR

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

RAINFALL STATION INDEX

STATION NAME	STATION NO.	LATITUDE	LONGITUDE	ELEV	EQUIPMENT TYPE	FIRST YEAR	OWNER	OPERATOR
MURRIETA HOT SPRINGS	7S/ 3W-14P01	33-33-28	117-09-16	1140	8 STD	1947D	NWS	E MURDEN
MURRIETA SCS	7S/ 3W-17P02	33-33-48	117-13-21	1131	8 STD	1955	SCS	SCS
MURDO FIRE DEPT	3S/ 6W-06P02	33-55-47	117-34-40	620	8 AUTO	1924	RCFC&WCD	RCFC&WCD
MORCO MELANIE	3S/ 6W-07P01	33-55-42	117-32-37	623	4 PLAS	1984	RCFC&WCD	C JOHNSON
NORTH PALM SPR SDF	3S/ 4E-10P01	33-55-28	115-32-44	875	4 PLAS	1959	RCFC&WCD	SDF
NORTH SHOPE SDF	7S/10E-34P01	33-31-14	115-56-13	-130	4 PLAS	1966	RCFC&WCD	SDF
NUVIEA SDF	4S/ 2W-18P01	33-49-03	117-07-55	1457	4 PLAS	1958	RCFC&WCD	SDF
OAK FLAT	4S/ 7W-17P01	33-49-15	117-38-18	2700	8 AUTO A	1975	OCFCO	OCFCO
OASIS SDF	8S/ 8E-11P01	33-29-37	116-06-44	-171	4 PLAS	1957	RCFC&WCD	SDF
PALM CANYON	5S/ 4E-23P01	33-43-35	116-31-58	1000		1919D	NWS	NWS
PALM CANYON TRIB	7S/ 5E-18P01	33-34-05	116-30-45	4500	8 AUTO	1968D	USGS	USGS
PALM CANYON USGS	5S/ 4E-11P01	33-44-42	116-32-05	700	8 AUTO	1978D	USGS	USGS
PALM DESERT	5S/ 5E-17P01	33-44-00	116-23-12	195	8 STD	1983	NWS	COLLEGE-DESERT
PALM DESERT SDF	5S/ 6E-19P01	33-43-08	116-23-33	260	4 PLAS	1951	RCFC&WCD	SDF
PALM SPRGS F D #1	4S/ 4E-15P01	33-49-34	116-32-41	465	8 STD	1938	PALM SPRGS F D	PALM SPRGS F D
PALM SPRGS F D #2	4S/ 4E-13P01	33-49-37	116-30-35	425	8 STD	1889	NWS	PALM SPRGS F D
PALOMA VALLEY	6S/ 3W-23P01	33-32-13	117-10-33	1540		1940D		ZEIDER
PAJARA RANCH OFFICE	8S/ 2W-16P01	33-28-45	117-05-50	1060		1921D	RANCHO CALIF	RANCHO CALIF
PAJARA RANCH STA A	7S/ 2W-26P01	33-32-17	117-02-54	1450		1920D	VAIL CO	H M HALL
PAJARA RANCH STA K	8S/ 1W-10P02	33-29-12	116-57-50	1410		1924D	VAIL CO	VAIL CO
PEOLEY SDF	2S/ 6W-26P01	33-58-31	117-29-07	710	4 PLAS	1955	RCFC&WCD	SDF
PEOLEY STORE	2S/ 6W-26P02	33-58-31	117-28-23	730	3 STD	1938D		A C YOUNG
PERRIS 1 KSW	4S/ 4W-35P01	33-46-46	117-14-42	1502	8 STD	1952D	NWS	G M SMITH
PERRIS RESERVOIR	4S/ 3W-09P01	33-50-04	117-11-59	1448	8 STD & AUTO	1964	DWR	EASTERN MWD
PERRIS SDF HCUS	4S/ 3W-30P01	33-47-15	117-13-45	1452	8 STD	1912	SDF	SDF
PERRIS ST PK	4S/ 3W-02P01	33-51-40	117-12-03	1520	4 PLAS	1972	RCFC&WCD	STATE PARK
PERPIS VALLEY CH	3S/ 3W-32P01	33-52-00	117-12-46	1460	12 AUTO A	1986	RCFC&WCD	RCFC&WCD
PERRIS VALLEY DRAIN	4S/ 3W-21P01	33-51-59	117-12-46	1413	8 AUTO	1970D	USGS	USGS
PIGEON PASS	2S/ 4W-23P01	33-59-15	117-16-08	1910	4 PLAS & AUTO	1957	RCFC&WCD	RCFC&WCD
PIGEON PASS DAM	2S/ 4W-36P01	33-57-10	117-14-45	1700	12 AUTO A	1986	RCFC&WCD	RCFC&WCD
PINE COVE SDF	5S/ 2E-11P01	33-45-40	116-44-12	6220	8 STD	1968	RCFC&WCD	SDF
PINYON FLAT SDF	7S/ 5E-11P01	33-35-08	116-26-50	4000	8 STD & AUTO	1963	RCFC&WCD	SDF & RCFC&WCD
POCKET FLATS	4S/ 1E-02P01	33-50-53	116-51-34	3520	8 STD	1937	RCFC&WCD	B SMITH
POTRERO CANYON	3S/ 1W-14P01	33-52-12	116-56-05	2640	8 AUTO	1937	RCFC&WCD	RCFC&WCD
PRADO DAM	3S/ 7W-20P01	33-53-25	117-39-08	575	4 PLAS & AUTO A	1940	USCE	USCE
PRADO USDA	3S/ 7W-20P02	33-53-25	117-39-39	480	8 STD	1931D	USDA	DEAN MUCKEL
QUAIL VALLEY SDF	5S/ 3W-30P01	33-42-07	117-14-22	1550	4 PLAS	1959	RCFC&WCD	SDF
R R CANYON DAM	6S/ 4W-02P01	33-40-28	117-16-26	1440	4 STD & AUTO A	1935	TEMESCAL WATER	TEMESCAL WATER
RADEC	8S/ 1E-19P01	33-27-30	116-54-50	1700		1952D		
RAINBOW COTTAGE	8S/ 2W-30P01	33-26-57	117-07-52	1300	8 STD	1958D	*WD	MWD
RANCHO MIRAGE R C	5S/ 5E-02P01	33-46-17	115-26-00	250	8 STD & AUTO	1981	HOB GREGG	B0B GREGG
RANCHO MIRAGE SDF	5S/ 5E-11P01	33-45-17	115-26-50	249	4 PLAS	1974	RCFC&WCD	SDF
RANCHO RAMONA	6S/ 1E-07P01	33-29-07	115-55-07	1400		1951D		
RAYWOOD FLAT	1S/ 2E-31P01	34-02-48	115-49-23	7070	8 STOR & AUTO A	1919	RCFC&WCD	RCFC&WCD
RECHE CANYON	2S/ 3W-14P01	33-59-42	117-13-52	1900	8 STD	1917	RCFC&WCD	MARIE WANTON

RAINFALL STATION INDEX

STATION NAME	STATION NO.	LATITUDE	LONGITUDE	ELEV.	EQUIPMENT TYPE	FIRST YEAR	OWNER	OPERATOR
RECHE CANYON AUTO	1S/ 4W-34P01	34-02-35	117-15-55	1120	8 STD & AUTO	1968	SBCFCO	SBCFCO
RED MOUNTAIN	6S/ 1E-23P01	33-38-00	116-52-25	9400	8 STOR & AUTO A	1979	RCFC&MCO	RCFC&MCO
RIPLEY SDF	7S/22E-35P01	33-31-30	114-39-20	250	8 STD	1960	SDF	SDF
ROMOLAND	5S/ 3W-11P01	33-44-45	117-10-02	1460	4 PLAS	1906	RCFC&MCO	MR. BAILEMAN
RUBIDOUX FIRE DEPT	2S/ 5W-15P01	33-55-56	117-24-16	776	4 PLAS	1966	RCFC&MCO	RUBIDOUX F D
RUBIDOUX LAB	2S/ 5W-22P01	33-58-48	117-23-18	338	8 STD	1935	USDA	L E FRANCOIS
RUBIDOUX NAT CTR	2S/ 5W-29P01	33-58-27	117-25-50	730	4 PLAS	1980	RCFC&MCO	PARK DEPT
RUSD CITRUS EX STA	2S/ 4W-30P01	33-50-02	117-20-40	886	8 STD & AUTO	1925	UCR	UCR
RUSD CO FLOOD CONT	2S/ 5W-14P01	34-00-10	117-22-40	800	8 STD & AUTO A	1981	RCFC&MCO	RCFC&MCO
RUSD FIRE STA #3	2S/ 5W-14P01	33-57-04	117-23-15	940	8 STD & AUTO	1981	NWS & RCFC&MCO	RFD & RCFC&MCO
RYAN AIP FIELD SDF	5S/ 1W-17P01	33-43-48	117-01-17	1509	4 PLAS	1956	RCFC&MCO	SDF
SAGE SDF	7S/ 1W-12P02	33-34-54	116-55-55	2390	4 PLAS	1939	RCFC&MCO	SDF
SALTON	RS/11E-18P01	33-28-24	115-53-06	-200	3 STD	1989	NWS	S P CO AGENTS
SAN CARLOS PASS	3S/ 1W-07P01	33-55-52	117-01-18	2400		1875	MWD	H MAYNARD
SAN JACINTO	4S/ 1W-22P01	33-47-14	116-58-04	1537	8 STD	1949	NWS	BYRON JOHANSEN
SAN JACINTO RESERV	4S/ 1W-29P01	33-47-45	116-59-55	1500	8 STD	1949	MWD	MWD
SAN JACINTO SDF	4S/ 1W-35P02	33-47-12	116-57-30	1556	8 STD & AUTO	1983	RCFC&MCO & NWS	SDF & RCFC&MCO
SAN TIMOTEC CANYON	2S/ 2W-28P01	33-58-22	117-05-59	1970	4 PLAS	1943	RCFC&MCO	FISHERMAN'S RT
SANTA ANA CANYON	3S/ 4W-25P01	33-52-30	117-39-43	450		1939	USDA	W TURNER
SANTA ROSA CGA	8S/ 4W-05P01	33-30-20	117-20-00	2140		1925	VAIL CO	H M HALL
SANTA ROSA MTN	7S/ 5E-26P01	33-32-15	115-26-20	7700	8 STOR	1981	RCFC&MCO	RCFC&MCO
SANTA ROSA RANCH	7S/ 4W-35P01	33-30-42	117-16-05	1420		1923	VAIL CO	H M HALL
SANTA ROSA RCH H	8S/ 3W-07P01	33-29-45	117-14-10	1250		1943		
SANTA ROSA RCH B1	8S/ 3W-07P02	33-28-45	117-14-10	1250		1943		
SANTA ROSA RCH C	8S/ 4W-12P01	33-29-29	117-15-08	900		1943		
SANTA ROSA RCH D	8S/ 4W-12P02	33-29-29	117-15-02	950		1944		
SANTA ROSA RCH DR	8S/ 4W-12P03	33-29-40	117-15-04	1200		1944		
SANTA ROSA RCH E	7S/ 3W-32P01	33-30-45	117-13-00	1450		1943		
SANTA ROSA RCH GTE	7S/ 3W-19P01	33-33-07	117-14-05	1240		1924	VAIL CO	H M HALL
SANTA ROSA RCH WSA	8S/ 4W-03P01	33-30-25	117-16-51	1980		1923	VAIL CO	H M HALL
SANTA ROSA RCH SAX	8S/ 3W-07P03	33-30-12	117-13-20	1600		1946		
SANTA ROSA SUMMIT	7S/ 4E-16P01	33-34-00	116-34-13	5000	8 STOR	1983	RCFC&MCO	RCFC&MCO
SANTIAGO PEAK	5S/ 6W-19P01	33-42-39	117-31-59	5638	8 AUTO A	1950	NWS & OCFCO	OCFCO
SIMS PANCH	4S/ 1E-27P01	33-47-50	116-52-22	2100		1938	MWD	FLORENCE SIMS
SINGLETON BASIN	2S/ 2W-25P02	33-58-15	117-02-30	2295		1935	MORENO M WATER	MORENO M WATER
SINGLETON RANCH	2S/ 2W-26P01	33-58-30	117-03-40	2210		1928	MORENO IRR CO	MORENO IRR CO
SKINNER LAKE	7S/ 1W-10P01	33-35-00	117-04-30	1490	8 STD	1962	MWD	MWD
SKINNER LAKE PARK	7S/ 1W-06P01	33-35-23	117-01-39	1350	8 AUTO	1978	RCFC&MCO	STATE PARK
SNOW CREEK	3S/ 3E-21P01	33-51-27	116-41-02	1275	8 STD	1919	NWS	D KENNEDY
SNOW CREEK UPPER	3S/ 3E-21P01	33-52-23	116-40-50	1940	8 STD	1939	RCFC&MCO	DESERT WATER
SOUTH FORK SJ RIV	5S/ 2E-20P01	33-43-20	115-48-00	2320	8 AUTO	1962	USGS	USGS
STEELE VALLEY F S	5S/ 4E-05P01	33-45-24	117-18-52	2000	8 STD	1978	RCFC&MCO	WESTERN UNION
STRATTON RANCH	3S/ 2E-31P01	33-51-45	116-49-00	3300	8 STD	1919	NWS	P C STATION
SUN CITY CDF	5S/ 3W-21P01	33-40-55	117-11-25	1425	8 STD & AUTO	1973	RCFC&MCO	CDF & RCFC&MCO
SUN CITY LEWAGE	5S/ 3W-22P01	33-41-44	117-12-32	1412	4 PLAS	1973	RCFC&MCO	EASTERN MWD

PROPOSED COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

RAINFALL STATION INDEX

STATION NAME	STATION NO.	LATITUDE	LONGITUDE	ELEV	EQUIPMENT TYPE	FIRST YEAR	OWNER	OPERATOR
SUNNYMEAD HARBETC	35/ 3W-06P01	33-55-37	117-13-42	1638	4 PLAS	1983	RCFC&MCO	D HARRATO
SUNNYMEAD SDF	35/ 4W-01P01	33-55-22	117-14-50	1541	4 PLAS	1955	RCFC&MCO	SDF
TACHEVAM ELM	45/ 4E-10P01	33-50-27	116-31-28	580	8 AUTO	1966	RCFC&MCO	RCFC&MCO
TEMESCAL SDF	65/ 3W-12P01	33-28-48	117-25-57	1220	8 STD & AUTO	1902	RCFC&MCO & NWS	SDF & RCFC&MCO
TEMESCAL ATR CO	35/ 7W-25P02	33-52-05	117-34-42	760	4 PLAS	1906	RCFC&MCO	TEMESCAL WATER
THERMAL AIRPORT SDF	65/ 8E-20P01	33-38-05	116-09-49	-113	4 PLAS & AUTO	1951	RCFC&MCO & NWS	SDF
THERMAL FAA A P	65/ 8E-20P02	33-38-02	116-09-45	-118	8 STD	1941	NWS	FED AVIATION
THOMAS MOUNTAIN	65/ 3E-28P01	33-37-05	116-40-53	5700	8 STOR	1979	RCFC&MCO	RCFC&MCO
THOUSAND PALMS SDF	45/ 6E-18P01	33-49-12	116-23-34	240	4 STD & AUTO	1959	RCFC&MCO	SDF & RCFC&MCO
TRAMWAY MT STA	45/ 3E-23P02	33-48-40	116-38-10	9540	8 AUTO	19640	RCFC&MCO	RCFC&MCO
TRAMWAY VALLEY STA	45/ 4E-07P01	33-50-13	116-35-45	2700	8 AUTO	1978	RCFC&MCO	RCFC&MCO
TWIN PINES RANCH	75/ 2E-02P01	33-35-36	116-45-04	3950	8 AUTO & 3 STD	19490	RCFC&MCO	DON FRY
UNIVERSITY CITY	25/ 4W-33P01	33-52-04	117-18-32	1515	4 PLAS	19780	RCFC&MCO	DENNIS MOODY
UPPER DRIVE	45/ 7W-12P01	33-50-02	117-34-45	1250	4 MAN	1931	CORONA LEM CO	CORONA LEM CO
VAIL DAM	85/ 1W-10P01	33-29-44	116-58-33	1350	8 STD	19630	USGS	USGS
VAIL RESERVOIR	85/ 1W-14P01	33-29-00	116-57-35	1450		19200	VAIL CO	VAIL CO
VAIL VERDE	45/ 4W-07P01	33-50-02	117-20-23	1550		19200	H J SMITH	H J SMITH
VISTA GRANDE RANCH	45/ 2E-16P01	33-49-00	116-47-00	2009		19340	MWD	A W HIBBARD
W N YACUT FARM	25/ 3E-22P01	33-53-23	116-39-20	2200	4 PLAS & AUTO	1975	RCFC&MCO	JOHN SHEARER
WADSWORTH RANCH	65/ 1E-25P01	33-36-55	116-49-50	3600	4 PLAS	19780	RCFC&MCO	ED WADSWORTH
WARM SPRINGS	55/ 6W-03P02	33-45-57	117-29-40	1149	4 MAN	1964	CORONA LEMON CO	CORONA LEM CO
WEST PORTAL	45/ 1W-15P01	33-49-16	116-57-59	1510	8 STD	1944	MWD	MWD
WEST RIVERSIDE SDF	25/ 5W-07P01	34-02-44	117-26-48	906	4 PLAS	1949	RCFC&MCO	SDF
WESTERN MND	45/ 5W-11P01	33-50-21	117-22-10	1490	4 PLAS	1971	RCFC&MCO	WESTERN MND
WHITewater CANYON	35/ 3E-02P01	33-56-50	116-38-22	1620	8 STD	19200	NWS	CVCWD
WHITewater RANCH	35/ 3E-10P01	33-55-18	116-39-26	1210	8 STD	19200	NWS	G HERKELRATH
WHITewater SPRR	35/ 3E-14P01	33-54-21	116-38-50	1123		18770	SPRR	
WHITTIER GROVES	55/ 1E-14P01	33-44-00	116-51-00	1900	STD	19270	W B WEIR	W B WEIR
WISS CANYON DAM	35/ 6E-05P01	33-56-04	116-23-27	1530	8 AUTO	1962	RCFC&MCO	RCFC&MCO
WILD ROSE P OFFICE	45/ 6W-07P01	33-47-45	117-29-58	928	3 STD	1914	CORONA LEM CO	CORONA LEM CO
WILD ROSE RANCH 57	45/ 6W-27P02	33-47-07	117-30-05	1100	8 STD	1972	RCFC&MCO	CORONA LEM CO
WILDOMAR	75/ 4W-02P01	33-35-51	117-15-35	1250	4 PLAS	1907	RCFC&MCO	DAVID BROWN
WILSON CREEK	75/ 1E-24P01	33-32-53	116-49-45	2900		19530		
WINCHESTER	55/ 2W-27P01	33-42-40	117-05-04	1474	8 AUTO	1941	RCFC&MCO	RCFC&MCO
WINCHESTER USDA	55/ 2W-26P01	33-42-45	117-03-50	1490		19405	USDA	
WOODCREST SDF	35/ 5W-25P02	33-53-05	117-21-01	1557	8 STD & AUTO	1955	RCFC&MCO	SDF & RCFC&MCO

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT 1985

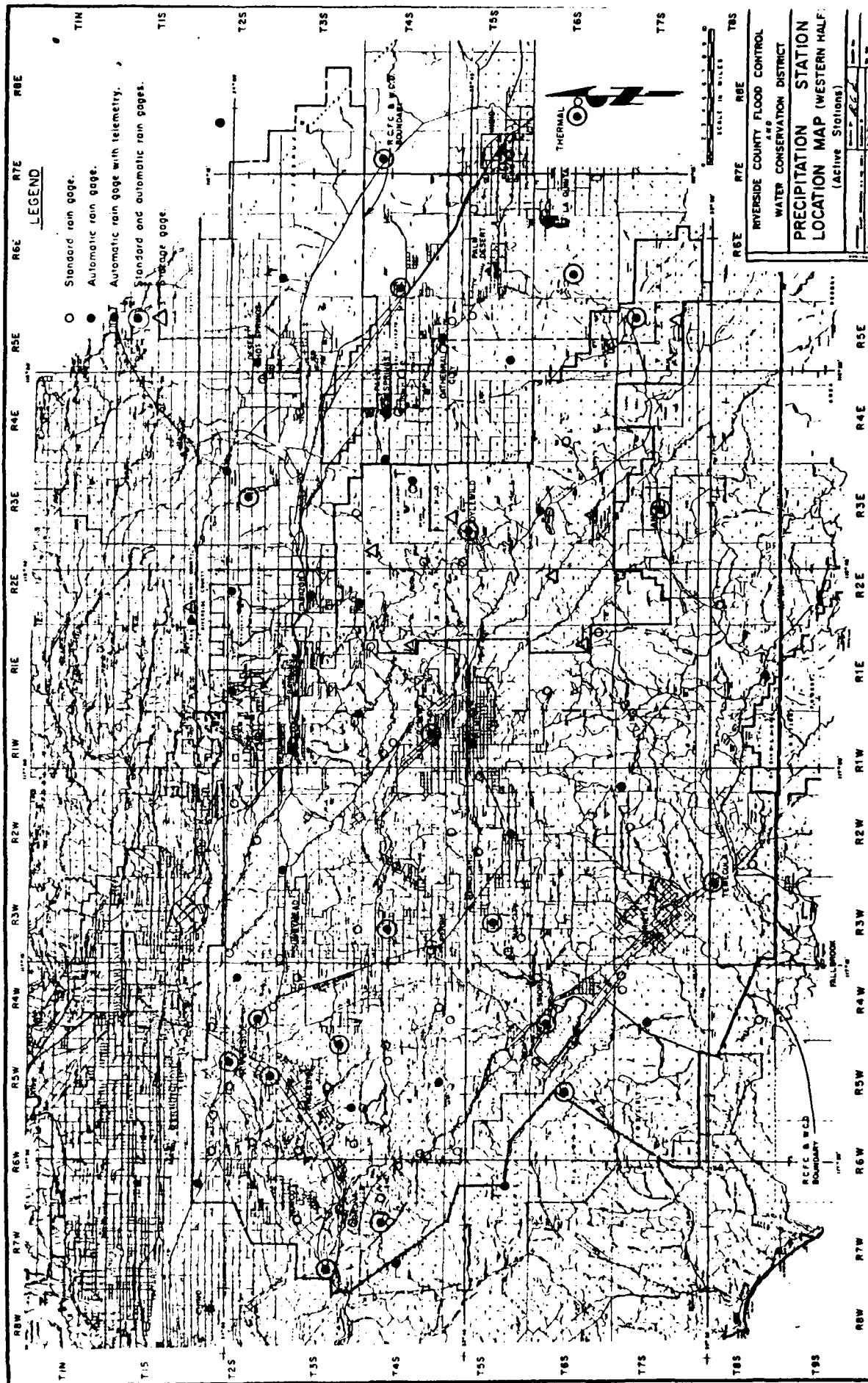
PAINFALL STATION CROSS INDEX

STATION NO.	STATION NAME	STATION NO.	STATION NAME	STATION NO.	STATION NAME
1S/ 4W-34P01	PECHES CANYON AUTO	3S/ 7W-35P01	CORONA FLD#5	4S/ 6W-27P02	WILD ROSE RANCH #7
1S/ 2E-11P01	RAYWOOD FLAT	3S/ 7W-35P01	CORONA FLD#5A	4S/ 5A-35P01	DANSON CANYON
1S/ 4E-28P01	MORRIS VALLEY	3S/ 5W-05P02	NORCO FIRE DEPT	4S/ 5W-07P01	LAKE MATHEWS IS #1
		3S/ 6W-07P01	NORCO MELANIE	4S/ 5W-10P01	LAKE MATHEWS IS #2
2S/ 6W-02P01	GLEN AVON	3S/ 6W-10P01	LA SIERRA FIRE STA	4S/ 5W-11P01	WESTERN RMO
2S/ 6W-03P01	MIRA LOMA SPACE C	3S/ 5W-30P01	CORONA NEAR	4S/ 5W-12P01	CAJALCO #2
2S/ 6W-10P01	GLEN AVON SDF	3S/ 5W-35P01	EAGLE VALLEY	4S/ 5W-12P02	CAJALCO #2
2S/ 6W-22P01	JURUPA RUTILE	3S/ 5W-04P01	ARLINGTON	4S/ 5W-13P01	GAULAN SPRINGS
2S/ 6W-24P01	PEOLEY SDF	3S/ 5W-21P01	MOCKINGBIRD RESERV	4S/ 4W-07P01	VAL VERDE
2S/ 6W-26P02	PEOLEY STORE	3S/ 5W-25P02	WOODCREST SDF	4S/ 4W-30P01	GAULAN HILLS
2S/ 5W-03P01	CRESTMORE	3S/ 5W-30P01	ARLINGTON HEIGHTS	4S/ 4W-33P01	GOOD HOPE
2S/ 5W-07P01	WEST RIVERSIDE SDF	3S/ 5W-32P01	HARRISON DAM	4S/ 4W-36P01	PERRIS 1 WSW
2S/ 5W-14P01	PVSD CO FLOOD CONT	3S/ 5W-32P02	HARRISON ARS #2	4S/ 3W-02P01	PERRIS ST PK
2S/ 5W-16P01	RUBIDOUX FIRE DEPT	3S/ 4W-01P01	SUNNYMEAD SDF	4S/ 3W-09P01	PERRIS RESERVOIR
2S/ 5W-22P01	RUBIDOUX LAR	3S/ 4W-11P01	EDGEMONT SDF	4S/ 3W-21P01	PERRIS VALLY DRAIN
2S/ 5W-29P01	RUBIDOUX NAT CTR	3S/ 4W-25P01	MAPCH AFB	4S/ 3W-30P01	PERRIS SDF HOGS
2S/ 5W-34P01	PVSD FIRE STA #3	3S/ 3W-06P01	SUNNYMEAD BARRETO	4S/ 2W-08P01	LAKEVIEW
2S/ 4W-06P01	HIGHGROVE STEAM PL	3S/ 3W-14P01	HENDRICKS RANCH	4S/ 2W-18P01	NUVIEW SDF
2S/ 4W-07P01	PIGEON PASS	3S/ 3W-32P01	PERRIS VALLEY CH	4S/ 1W-09P01	GILMAN HOTSPRINGS
2S/ 4W-23P01	PIGEON PASS DAM	3S/ 2W-05P01	MORENO VALLEY	4S/ 1W-15P01	WEST PORTAL
2S/ 4W-27P01	PIGEON PASS	3S/ 1W-07P01	CAN GORGONIO PASS	4S/ 1W-22P01	SAN JACINTO
2S/ 4W-27P01	PIGEON PASS	3S/ 1W-10P01	HEAUMONT	4S/ 1W-29P01	SAN JACINTO RESERV
2S/ 4W-30P01	PVSD CITIUS EX STA	3S/ 1W-11P01	HEAUMONT 1E	4S/ 1W-35P02	SAN JACINTO SDF
2S/ 4W-34P01	UNIVERSITY CITY	3S/ 1W-11P02	HEAUMONT SDF	4S/ 1E-02P01	POPPET FLATS
2S/ 4W-36P01	PIGEON PASS DAM	3S/ 1W-19P01	BEAUMONT NEAR	4S/ 1E-23P01	ANGELES HILL
2S/ 3W-18P01	RECHE CANYON	3S/ 1W-36P01	POTRERO CANYON	4S/ 1E-27P01	SIMS RANCH
2S/ 2W-25P02	CALIFORNIA SDF	3S/ 1E-09P01	BANNING WATER CO	4S/ 2E-01P01	BLACK MTN-YMCA
2S/ 2W-29P02	SINGLETON RASIN	3S/ 1E-15P01	BANNING	4S/ 2E-16P01	VISTA GRANDE RANCH
2S/ 2W-26P01	SINGLETON RANCH	3S/ 2E-15P01	CABAZON	4S/ 2E-26P01	LAWLER CO PARK
2S/ 2W-24P01	SAN TIMOTEO CANYON	3S/ 2E-15P02	CABAZON SDF	4S/ 2E-26P02	DECKERS RANCH
2S/ 1W-23P01	HEAUMONT PUMP PLNT	3S/ 2E-20P01	CABAZON SHAFT	4S/ 2E-34P01	ALANDALE
2S/ 1W-23P02	CHEPPY VALLEY SDF	3S/ 2E-31P01	STRATTON RANCH	4S/ 3E-23P01	MT SAN JACINTO WSP
2S/ 1E-17P01	BANNING BENCH NO.2	3S/ 2E-32P01	TWIN PINES RANCH	4S/ 3E-23P02	TRAMWAY MT STA
2S/ 1E-30P01	BANNING BENCH	3S/ 3E-02P01	WHITEWATER CANYON	4S/ 4E-07P01	TRAMWAY VALLEY STA
2S/ 2E-16P01	WILLARD CYN-RADGER	3S/ 3E-10P01	WHITEWATER RANCH	4S/ 4E-10P01	TACHEVAN DAM
2S/ 2E-16P02	WILLARD CANYON	3S/ 3E-14P01	WHITEWATER SPRR	4S/ 4E-13P01	PALM SPRGS F D #2
2S/ 2E-21P01	WILLARD FORKS	3S/ 3E-21P01	SNOW CREEK	4S/ 4E-15P01	PALM SPRGS F D #1
2S/ 2E-32P01	WILLARD CANYON	3S/ 3E-33P01	SNOW CREEK UPPER	4S/ 5E-19P01	DESERT MTR AGENCY
2S/ 3E-12P01	MISSION CREEK	3S/ 4E-10P01	NORTH PALM SPR SDF	4S/ 5E-33P01	CATHEDRAL CITY SDF
2S/ 3E-22P01	M W TROUT FARM	3S/ 6E-05P01	WIDE CANYON DAM	4S/ 5E-33P03	CATHEDRAL CITY # C
2S/ 5E-30P01	DESERT HOT SPR SDF	3S/ 6E-07P01	JOSHUA TREE 5000	4S/ 6E-18P01	THOUSAND PALMS SDF
2S/ 5E-30P02	DESERT HOT SPR W C			4S/ 7E-11P01	INDIO HILLS MORLEY
2S/ 6E-12P01	COVINGTON FLAT	4S/ 7W-01P01	CORONA JAMISON	4S/ 8E-16P01	HERDOD CAMP
2S/ 6E-07P01	JOSHUA TREE L S RS	4S/ 7W-02P01	CORONA SIAS	4S/ 15E-19P01	EAGLE MOUNTAIN
3S/ 8W-35P01	SANTA ANA CANYON	4S/ 7W-10P01	MAGADOR RIDGE	5S/ 6W-03P01	GLEN IVY
3S/ 8W-36P01	GRN RIVER GOLF C	4S/ 7W-12P01	UPPER DRIVE	5S/ 6W-03P02	WARM SPRINGS
3S/ 7W-13P01	CORONA SDF	4S/ 7W-12P02	CORONA BARBES F 37	5S/ 6W-19P01	SANTIAGO PEAK
3S/ 7W-20P01	PRADO DAM	4S/ 7W-17P01	OAK FLAT	5S/ 5W-35P01	ELSIMORE-BERMAN
3S/ 7W-20P02	PRADO USNA	4S/ 5W-01P01	LAKE MATHEWS	5S/ 4W-05P01	STEELE VALLEY # 3
3S/ 7W-26P02	TEMESCAL MTR CO	4S/ 6W-05P01	CORONA FLD#4	5S/ 3W-11P01	POMCLAND
3S/ 7W-26P03	CORONA FIRE DEPT	4S/ 6W-07P01	CORONA SOUTH	5S/ 3W-21P01	SUN CITY SDF
3S/ 7W-34P01	LOWEE RANCH	4S/ 6W-16P01	EL CERRITO SDF	5S/ 3W-30P01	QUAIL VALLEY SDF
		4S/ 6W-27P01	WILD ROSE R OFFICE	5S/ 3W-32P01	SUN CITY SEWAGE
				5S/ 2W-03P01	JUNIPER FLATS

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

RAINFALL STATION CROSS INDEX

STATION NO.	STATION NAME	STATION NO.	STATION NAME	STATION NO.	STATION NAME
55/ 2W-17P01	HOMELAND	55/ 3W-20P01	HURDY CANYON RD	75/ 3E-04P01	ANZA-CAPTIER
55/ 2W-26P01	WINCHESTER USDA	55/ 3W-23P01	PALOMA VALLEY	75/ 3E-16P01	ANZA SDF
55/ 2W-27P01	WINCHESTER	55/ 1E-23P01	RED MOUNTAIN	75/ 3E-31P01	CAMUILLA
55/ 1W-11P01	HENET	65/ 1E-25P01	WADEIGH RANCH	75/ 4E-16P01	SANTA ROSA SUMMIT
55/ 1W-13P01	LITTLE LAKE SDF	55/ 2E-10P01	MILKY SPRINGS	75/ 5E-11P01	PINYON FLAT SDF
55/ 1W-17P01	RYAN AIR FIELD SDF	55/ 3E-04P01	HURKEY CREEK PARK	75/ 5E-18P01	PALM CANYON TPIR
55/ 1W-20P01	LA SIERRA RANCH	55/ 3E-09P01	HEMET RESERVOIR	75/ 5E-26P01	SANTA ROSA MTN
55/ 1E-14P01	WHITTIER GROVES	55/ 3E-28P01	THOMAS MOUNTAIN	75/ 9E-08P01	MECCA SDF
55/ 2E-11P01	PINE COVE SDF	55/ 4E-17P01	CAMP SCHERMAN	75/10E-14P01	NORTH SHORE SDF
55/ 2E-20P01	SOUTH FORK SJ RIV	55/ 5E-17P01	DEEP CANYON LAH	75/22E-35P01	RIPELY SDF
55/ 3E-05P01	HUMBER PARK FVAD	55/ 5E-19P01	DEEP CANYON AGAVE		
55/ 3E-07P01	ICVLLWILD PIPE DPT	55/ 7E-05P01	LA QUINTA SDF	85/ 4W-03P01	SANTA ROSA RCH MGA
55/ 4E-11P01	PALM CANYON USGS	55/ 3E-20P01	THERMAL AIRPT SDF	85/ 4W-05P01	SANTA ROSA SGA
55/ 4E-23P01	PALM CANYON	55/ 8E-27P02	THERMAL FAA A P	85/ 4W-12P01	SANTA ROSA RCH C
55/ 5E-02P01	RANCHO MIRAGE R C	65/22E-31P01	BLTYHE AIRBASE SDF	85/ 4W-12P02	SANTA ROSA RCH D
55/ 5E-11P01	RANCHO MIRAGE SDF	65/23E-32P01	BLTYHE SDF	85/ 4W-12P03	SANTA ROSA RCH DR
55/ 5E-29P01	HAYSTACK-MNT			85/ 4W-25P02	CELUZ
55/ 6E-17P01	PALM DESERT	75/ 4W-02P01	WILDOMAR	85/ 3W-07P01	SANTA ROSA RCH B
55/ 6E-18P01	PALM DESERT SDF	75/ 4W-03P01	HOWELL RANCH	85/ 3W-07P02	SANTA ROSA RCH B1
55/ 6E-23P01	INDIAN WELLS	75/ 4W-17P01	LA CRESTA	85/ 3W-07P03	SANTA ROSA RCH SAX
55/ 7E-07P01	PEPMUDA DUNES SDF	75/ 4W-35P01	SANTA ROSA RANCH	85/ 3W-12P01	TEMECULA SDF
55/ 7E-22P01	INDIO DATE GARDEN	75/ 3W-14P01	MURRIETA HOT SPRGS	85/ 2W-16P01	PAUSA RANCH OFFICE
55/ 7E-26P01	INDIO SDF	75/ 3W-15P01	MURRIETA DNR	85/ 2W-30P01	RAINBOW COTTAGE
55/11E-10P01	COTTONWOOD WASH	75/ 3W-17P02	MURRIETA SCS	85/ 1W-10P01	VAIL DAM
55/13E-24P01	HAYFIELD PUMP PLNT	75/ 3W-19P01	SANTA ROSA RCH GIE	85/ 1W-10P02	PAUHA RANCH STA K
55/16E-05P01	DESERT CENTER	75/ 3W-32P01	SANTA ROSA RCH E	85/ 1W-14P01	VAIL RESERVOIR
		75/ 2W-10P01	SKINNER LAKE	85/ 1E-07P01	RANCHO PAMONA
65/ 5W-02P01	ELCINGORE ST PARK	75/ 2W-12P01	LOS ALAMOS VALLEY	85/ 1E-19P01	RADEC
65/ 5W-11P01	ELSINORE PPAY	75/ 2W-15P01	LOS ALAMOS GREENWD	85/ 1E-28P01	AGUANGA VALLEY
65/ 5W-13P01	LAKELAND VILL SDF	75/ 2W-26P01	PAUBA RANCH STA A	85/ 1E-34P01	AGUANGA-THOMSEN
65/ 5W-16P01	EL CARISO STATION	75/ 1W-06P01	SKINNER LAKE PARK	85/ 2E-08P01	AGUANGA BRADFOPOD
65/ 4W-02P01	R R CANYON DAM	75/ 1W-12P02	SAGE SDF	85/ 4E-14P01	HORSE CANYON
65/ 4W-07P01	ELSINORE SDF	75/ 1E-24P01	WILSON CREEK	85/ 5E-31P01	COYOTE CANYON
65/ 4W-23P01	ELSINORE 4SE	75/ 2E-02P01	TRIPP FLATS	85/ 8E-11P01	CASIS SDF
65/ 4W-24P01	ELSINORE 4SSE	75/ 2E-27P01	MURCELL RANCH	85/11E-18P01	SALTON



ACTIVE - PRECIPITATION STATION INDEX 1977 (ALPHABETICAL)

STATION NAME (4)	STATION NO.	LATITUDE	LONGITUDE	ELEV.	EQUIPMENT TYPE (1)	FIRST YEAR (2)	OWNER	OPERATOR
MAYFIELD CUMM FLAT (d) JES/13E-28001	33-42-20	117-10-07	1370	A STD & AUTO	1935	MWD	MWD	MWD & NWS
MAVETACK-MUNY (a)	55/ 5E-28001	33-42-20	117-10-07	2400	A AUTO	1980	RCFCRUCD	RCFCRUCD
MEMET RESERVOIR (b)	55/ 1U-11001	33-44-53	116-56-43	1460	6 STD	1911	MWS	LAKE MEMET MWD
MEMET RESERVOIR (b)	55/ 3E-08001	33-44-53	116-56-43	4255	A STD	1917	LAKE MEMET MTP	CFCILE BEACH
MEMET RESERVOIR (b)	55/ 3E-08001	33-44-53	116-56-43	4255	A PLAS	1956	RCFCRUCD	SDF
MEMET RESERVOIR (b)	25/ 4U-17001	33-44-53	117-10-48	745	A PLAS	1962	RCFCRUCD	R STANLEY
MEMET RESERVOIR (b)	55/ 2U-17001	33-44-53	117-10-48	1572	A PLAS	1962	RCFCRUCD	RCFCRUCD
MEMET RESERVOIR (b)	75/ 4U-08001	33-44-53	117-10-48	1300	A PLAS	1966	RCFCRUCD	RCFCRUCD
MEMET RESERVOIR (b)	55/ 3E-08001	33-44-53	116-56-43	6320	A STD	1960	RCFCRUCD	RCFCRUCD
MEMET RESERVOIR (b)	65/ 3E-08001	33-44-53	116-56-43	4200	8 AUTO	1962	MWS	RCFCRUCD
MEMET RESERVOIR (b)	75/ 3E-08001	33-44-53	116-56-43	5397	8 STD & AUTO	1991	MWS	RCFCRUCD
MEMET RESERVOIR (b)	55/ 7E-22001	33-42-38	116-14-39	11	8 STD	1878	MWS	US DATE-C STA
MEMET RESERVOIR (b)	45/ 7E-11001	33-42-38	116-14-39	1160	8 STD & AUTO	1976	RCFCRUCD	RCFCRUCD
MEMET RESERVOIR (b)	55/ 7E-28001	33-42-38	116-14-39	8	4 PLAS	1951	RCFCRUCD	SDF
MEMET RESERVOIR (b)	25/ 9E-07001	34-01-00	116-11-24	4200	8 AUTO	1969	RCFCRUCD	RCFCRUCD
MEMET RESERVOIR (b)	55/ 2U-02001	33-45-49	117-04-57	2110	4 PLAS	1964	RCFCRUCD	RCFCRUCD
MEMET RESERVOIR (b)	75/ 4U-17001	33-42-38	116-14-39	2270	8 AUTO	1980	RCFCRUCD	RCFCRUCD
MEMET RESERVOIR (b)	45/ 7E-06001	33-40-25	116-17-50	85	4 PLAS	1951	RCFCRUCD	SDF
MEMET RESERVOIR (b)	35/ 6U-10001	33-55-07	117-20-12	712	4 PLAS	1956	RCFCRUCD	RCFCRUCD
MEMET RESERVOIR (b)	45/ 6U-10001	33-51-07	117-25-47	1447	8 STD	1939	MWD	MWD
MEMET RESERVOIR (b)	65/ 5U-13001	33-36-13	117-20-44	1719	4 PLAS	1956	RCFCRUCD	SDF
MEMET RESERVOIR (b)	45/ 2E-26001	33-47-40	116-44-41	5200	8 STD	1975	RCFCRUCD	RCFCRUCD
MEMET RESERVOIR (b)	55/ 1U-13001	33-44-42	116-56-53	1495	8 STD	1960	RCFCRUCD	RCFCRUCD
MEMET RESERVOIR (b)	75/ 9E-08001	33-34-20	116-04-37	190	8 STD	1906	RCFCRUCD	SDF
MEMET RESERVOIR (b)	65/ 2E-10001	33-39-40	116-45-35	9640	8 STD	1979	RCFCRUCD	RCFCRUCD
MEMET RESERVOIR (b)	25/ 2E-16001	33-45-00	116-47-15	3740	8 AUTO	1980	RCFCRUCD	RCFCRUCD
MEMET RESERVOIR (b)	25/ 5U-05001	34-01-46	117-31-47	827	8 AUTO	1909	RCFCRUCD	RCFCRUCD
MEMET RESERVOIR (b)	35/ 3E-12001	33-00-40	116-37-38	2400	8 AUTO	1968	USGS	USGS
MEMET RESERVOIR (b)	35/ 5U-21001	33-52-44	117-24-54	1112	8 STD	1939	GAGE CANAL CC	GAGE CANAL CC
MEMET RESERVOIR (b)	35/ 2U-06001	33-56-27	117-08-14	1840	8 AUTO	1922	RCFCRUCD	RCFCRUCD
MEMET RESERVOIR (b)	45/ 3E-23001	33-44-40	116-16-23	8417	8 STD	1966	RCFCRUCD	STATE PARKS
MEMET RESERVOIR (b)	75/ 3U-17001	33-33-48	117-13-21	1131	8 STD	1955	SCS	SCS
MEMET RESERVOIR (b)	35/ 5U-16001	33-55-47	117-34-40	620	8 STD	1924	RCFCRUCD	RCFCRUCD
MEMET RESERVOIR (b)	35/ 4E-10001	33-55-20	116-32-44	875	4 PLAS	1959	RCFCRUCD	RCFCRUCD
MEMET RESERVOIR (b)	75/ 10E-34001	33-31-14	115-56-13	-140	4 PLAS	1966	RCFCRUCD	RCFCRUCD
MEMET RESERVOIR (b)	45/ 2U-18001	33-45-03	117-07-55	1467	4 PLAS	1958	RCFCRUCD	RCFCRUCD
MEMET RESERVOIR (b)	45/ 7U-17001	33-40-18	117-38-18	2700	8 AUTO	1975	RCFCRUCD	RCFCRUCD
MEMET RESERVOIR (b)	55/ 6E-11001	33-20-37	116-06-44	-171	4 PLAS	1957	RCFCRUCD	RCFCRUCD
MEMET RESERVOIR (b)	55/ 6E-19001	33-41-08	116-21-33	275	4 PLAS	1951	RCFCRUCD	RCFCRUCD
MEMET RESERVOIR (b)	45/ 4E-15001	33-40-34	116-32-41	445	8 STD	1937	PALM SPRGS F C	PALM SPRGS F C
MEMET RESERVOIR (b)	45/ 4E-15001	33-40-37	116-32-41	425	8 STD	1960	MWS	PALM SPRGS F C
MEMET RESERVOIR (b)	25/ 5U-26001	33-58-31	117-20-07	710	4 PLAS	1955	RCFCRUCD	RCFCRUCD
MEMET RESERVOIR (b)	45/ 3U-04001	33-50-04	117-11-59	1448	8 STD & AUTO	1964	DUP	RCFCRUCD
MEMET RESERVOIR (b)	45/ 3U-30001	33-47-15	117-13-45	1452	8 STD	1912	RCFCRUCD	RCFCRUCD
MEMET RESERVOIR (b)	45/ 3U-02001	33-51-40	117-12-07	1420	4 PLAS	1972	RCFCRUCD	RCFCRUCD
MEMET RESERVOIR (b)	25/ 4U-23001	33-50-16	117-14-09	1910	8 AUTO	1957	RCFCRUCD	RCFCRUCD

ACTIVE

STATION NAME (4)	STATION NO.	LATITUDE	LONGITUDE	ELEV (1)	EQUIPMENT TYPE (1)	FIRST YEAR	OWNER (2)	OPERATOR
PINE POVE CNE	55/ 2F-11-01	33-45-40	116-44-12	4220	R STD	1964	RCFC&UCD	SDF
PINONA FLAT SDF (d,e)	75/ 5F-11-01	33-45-08	116-26-50	4200	R STD & AUTO	1963	RCFC&UCD	SDF & RCFC&UCD
PINONA FLATS (x)	75/ 1F-12-01	33-45-50	116-51-34	3520	R STD	1937	RCFC&UCD	R SPITH
PINONA CANYON (x)	75/ 1U-16-01	33-52-12	116-54-05	2640	R AUTO	1937	RCFC&UCD	RCFC&UCD
FRANCIS DAM (R, d)	35/ 7U-20-01	33-53-25	117-38-08	575	B STD & AUTO	1940	USCE	USCE
QUARTZ VALLEY CNE	55/ 3U-20-01	33-42-07	117-14-22	1550	4 PLAS	1959	RCFC&UCD	SDF
QUARTZ CANYON (e)	55/ 4U-20-01	33-40-20	117-16-26	1440	4 STD	1927	TEMESCAL WATER	TEMESCAL WATER
PAINTBOX COTTAGE	55/ 2U-30-01	33-26-57	117-07-52	1300	8 STD	1958	MWD	MWD
WANCOC MOUNTAIN (a, b)	55/ 5F-02-01	33-41-17	116-26-00	250	8 STD	1981	BOB GREGG	BOB GREGG
WANCOC MOUNTAIN SDF (a)	55/ 5F-11-01	33-41-17	116-26-50	249	4 PLAS	1978	RCFC & WCD	RCFC & WCD
RAYMOND FLAT	15/ 2F-11-01	33-40-48	116-45-23	7170	R STD & AUTO-T	1919	RCFC&UCD	RCFC&UCD
REYNE CANYON	25/ 3F-11-01	33-40-42	117-13-52	1500	P STD	1917	RCFC&UCD	MARIE MANTON
RED MOUNTAIN (a, b)	55/ 1F-23-01	33-31-00	116-50-25	4400	8 STD	1979	RCFC & WCD	RCFC & WCD
REYNE CNE (3)	75/ 2F-23-01	33-31-30	116-49-20	240	8 STD	1960	SDF	SDF
REYNE CNE (x)	55/ 3U-11-01	33-44-45	117-10-02	1460	4 PLAS	1906	RCFC&UCD	MR. BATEMAN
RUBINOUX CNE OFFT	25/ 5U-16-01	33-55-50	117-24-14	776	4 PLAS	1966	RCFC&UCD	RUBINOUX F D
RUBINOUX LAKE	25/ 5U-22-01	33-40-46	117-23-18	814	6 STD	1935	USDA	L F FRANCOIS
ROCK CITRUS EX STA (d)	25/ 4U-30-01	33-55-02	117-20-40	946	8 STD & AUTO	1925	UCR	UCR
ROCK CITRUS CNE	25/ 5U-14-01	33-40-10	117-22-40	800	R STD & AUTO	1981	RCFC&UCD	RCFC&UCD
ROCK CITRUS STA #3	25/ 5U-34-01	33-57-04	117-23-15	840	R STD & AUTO	1981	NWS & RCFC&UCD	RED & RCFC&UCD
ROCK ATE FIELD SDF	55/ 1U-17-01	33-43-48	117-01-17	1509	4 PLAS	1956	RCFC&UCD	SDF
ROCK SDF	75/ 1U-12-01	33-34-54	116-55-55	2200	4 PLAS	1939	RCFC&UCD	SDF
ROCK SDF (a, b)	55/ 1U-20-01	33-47-12	116-57-30	1556	8 STD & AUTO	1993	RCFC&UCD & NWS	SDF
ROCK SDF (a, b)	55/ 1U-26-01	33-56-22	117-05-59	1570	4 PLAS	1943	RCFC&UCD	D CANTRILL
ROCK SDF (a, b)	75/ 5F-26-01	33-43-39	117-23-59	5629	8 AUTO	1950	NWS & RCFC&UCD	RCFC&UCD
ROCK SDF (a, b)	75/ 2U-10-01	33-45-00	117-04-30	1490	8 STD	1962	MWD	MWD
ROCK SDF (a, b)	75/ 1U-20-01	33-35-23	117-01-39	1550	P AUTO	1978	RCFC&UCD	STATE PARK
ROCK SDF (a, b)	55/ 1F-23-01	33-52-23	116-40-59	1940	P STD	1939	RCFC&UCD	DESERT WATER
ROCK SDF (a, b)	55/ 4U-26-01	33-45-24	117-18-52	2400	8 STD	1978	RCFC&UCD	WESTERN UNION
ROCK SDF (a, b)	55/ 3U-21-01	33-42-55	117-11-25	1426	R STD & AUTO	1973	RCFC&UCD	SDF & RCFC&UCD
ROCK SDF (a, b)	55/ 3U-32-01	33-41-44	117-12-32	1412	4 PLAS	1970	RCFC&UCD	EASTERN MWD
ROCK SDF (a, b)	55/ 4U-10-01	33-54-22	117-14-50	1641	4 PLAS	1956	RCFC&UCD	SDF
ROCK SDF (a, b)	55/ 4U-10-01	33-50-27	116-23-34	584	P AUTO	1966	RCFC&UCD	RCFC&UCD
ROCK SDF (a, b)	55/ 3U-12-01	33-42-48	117-00-57	1120	R STD & AUTO	1902	RCFC&UCD & NWS	SDF
TEMESCAL WTR CN	35/ 7U-20-01	33-53-05	117-38-42	700	4 PLAS	1906	RCFC&UCD	TEMESCAL WATER
TEMESCAL RIFLET SDF (d)	55/ 4E-20-01	33-36-08	116-00-49	-118	P STD	1951	RCFC&UCD & NWS	SDF AVIATION
TEMESCAL FLA 2 F (R)	55/ 4E-20-01	33-36-08	116-00-49	-118	P STD	1951	NWS	FED AVIATION
THOMAS MOUNTAIN (a, b)	55/ 4F-20-01	33-41-05	116-40-55	4700	8 STD	1979	RCFC&UCD	RCFC&UCD
THOMAS MOUNTAIN SDF (e)	55/ 4F-20-01	33-41-05	116-40-55	4700	8 STD	1979	RCFC&UCD	SDF & RCFC&UCD
THOMAS MOUNTAIN SDF (f)	55/ 4F-20-01	33-41-05	116-40-55	4700	8 STD	1979	RCFC&UCD	SDF & RCFC&UCD
THOMAS MOUNTAIN SDF (g)	55/ 4F-20-01	33-41-05	116-40-55	4700	8 STD	1979	RCFC&UCD	SDF & RCFC&UCD
THOMAS MOUNTAIN SDF (h)	55/ 4F-20-01	33-41-05	116-40-55	4700	8 STD	1979	RCFC&UCD	SDF & RCFC&UCD
THOMAS MOUNTAIN SDF (i)	55/ 4F-20-01	33-41-05	116-40-55	4700	8 STD	1979	RCFC&UCD	SDF & RCFC&UCD
THOMAS MOUNTAIN SDF (j)	55/ 4F-20-01	33-41-05	116-40-55	4700	8 STD	1979	RCFC&UCD	SDF & RCFC&UCD
THOMAS MOUNTAIN SDF (k)	55/ 4F-20-01	33-41-05	116-40-55	4700	8 STD	1979	RCFC&UCD	SDF & RCFC&UCD
THOMAS MOUNTAIN SDF (l)	55/ 4F-20-01	33-41-05	116-40-55	4700	8 STD	1979	RCFC&UCD	SDF & RCFC&UCD
THOMAS MOUNTAIN SDF (m)	55/ 4F-20-01	33-41-05	116-40-55	4700	8 STD	1979	RCFC&UCD	SDF & RCFC&UCD
THOMAS MOUNTAIN SDF (n)	55/ 4F-20-01	33-41-05	116-40-55	4700	8 STD	1979	RCFC&UCD	SDF & RCFC&UCD
THOMAS MOUNTAIN SDF (o)	55/ 4F-20-01	33-41-05	116-40-55	4700	8 STD	1979	RCFC&UCD	SDF & RCFC&UCD
THOMAS MOUNTAIN SDF (p)	55/ 4F-20-01	33-41-05	116-40-55	4700	8 STD	1979	RCFC&UCD	SDF & RCFC&UCD
THOMAS MOUNTAIN SDF (q)	55/ 4F-20-01	33-41-05	116-40-55	4700	8 STD	1979	RCFC&UCD	SDF & RCFC&UCD
THOMAS MOUNTAIN SDF (r)	55/ 4F-20-01	33-41-05	116-40-55	4700	8 STD	1979	RCFC&UCD	SDF & RCFC&UCD
THOMAS MOUNTAIN SDF (s)	55/ 4F-20-01	33-41-05	116-40-55	4700	8 STD	1979	RCFC&UCD	SDF & RCFC&UCD
THOMAS MOUNTAIN SDF (t)	55/ 4F-20-01	33-41-05	116-40-55	4700	8 STD	1979	RCFC&UCD	SDF & RCFC&UCD
THOMAS MOUNTAIN SDF (u)	55/ 4F-20-01	33-41-05	116-40-55	4700	8 STD	1979	RCFC&UCD	SDF & RCFC&UCD
THOMAS MOUNTAIN SDF (v)	55/ 4F-20-01	33-41-05	116-40-55	4700	8 STD	1979	RCFC&UCD	SDF & RCFC&UCD
THOMAS MOUNTAIN SDF (w)	55/ 4F-20-01	33-41-05	116-40-55	4700	8 STD	1979	RCFC&UCD	SDF & RCFC&UCD
THOMAS MOUNTAIN SDF (x)	55/ 4F-20-01	33-41-05	116-40-55	4700	8 STD	1979	RCFC&UCD	SDF & RCFC&UCD
THOMAS MOUNTAIN SDF (y)	55/ 4F-20-01	33-41-05	116-40-55	4700	8 STD	1979	RCFC&UCD	SDF & RCFC&UCD
THOMAS MOUNTAIN SDF (z)	55/ 4F-20-01	33-41-05	116-40-55	4700	8 STD	1979	RCFC&UCD	SDF & RCFC&UCD

ACTIVE PRECIPITATION STATION INDEX 1977 (ALPHABETICAL)

STATION NAME (4)	STATION NO.	LATITUDE	LONGITUDE	ELEV (1)	EQUIPMENT TYPE (1)	OWNR	FIRST YEAR (2)	OPERATOR
LA TRIBUT FARM (a)	25/ 3E-22P01	33-50-23	114-30-20	2270	4 PLAS R AUTO	RCFCRUCD	1978	JOHN SHEADER
MADEIGH RANCH (a)	65/ 1E-25P01	33-16-54	116-40-40	3400	4 PLAS	RCFCRUCD	1978	ED WAGLEIGH
WEST BORTAL	45/ 1W-15P01	33-40-16	114-57-59	1510	8 STD	MWD	1963	MWD
WEST RYPOPELIE SPR	25/ 5W-27P01	34-00-44	117-26-48	906	4 PLAS	RCFCRUCD	1949	SDF
WESTERN MUD	45/ 5W-11P01	33-50-21	117-22-10	1480	4 PLAS	RCFCRUCD	1971	WESTERN MUD
WIDE CANYON DAM (a)	35/ 6F-05P01	33-56-04	116-23-27	1530	8 AUTO-T	RCFCRUCD	1962	RCFCRUCD
WILN BNSF R RCTFF	45/ 6W-27P01	33-47-45	117-29-58	228	3 STD	CORONA LEM CO	1914	CORONA LEM CO
WILN BNSF RANCH 47	45/ 6W-27P02	33-47-07	117-30-05	1100	8 STD	RCFCRUCD	1972	CORONA LEM CO
WILDOMAR	75/ 4W-22P01	33-34-51	117-15-15	1250	4 PLAS	RCFCRUCD	1907	DAVID BROWN
WIMCUESTE (L)	55/ 2W-27P01	33-42-40	117-05-04	1474	8 AUTO	RCFCRUCD	1941	RCFCRUCD
WOODPEST SPR	35/ 5W-25P02	33-52-05	117-21-01	1557	8 STD R AUTO	RCFCRUCD	1956	SNF R RCFCRUCD

NOTES:

1. The number under equipment type denotes the catchment diameter in inches. Gage type codes are as follows:

- STD - Standard SMS type gage (with inner measuring tube)
- PLAS - Plastic gage of standard design (with inner measuring tube)
- MAN - All non-standard type manual gages
- STOR - Storage gage
- AUTO - Automatic continuous recording rain gage
- T - Telemetry equipped station

2. First year denotes first fiscal year, i.e., record beginning in November 1943 would show up as 1944.

3. Stations located in eastern Riverside County and not shown on Location Map (Figure 3).

4. Major revisions since last report are as follows:

INDEX CODES:

- a - New station
- b - Station not previously published by the District, data not published for 1976-77 for "MIRA LOMA QM DEPOT" and "HEMET RESERVOIR"
- d - Stations not previously published by District in Table 3 (Maximum Annual Short Duration Precipitation Summary)
- e - Equipment change
- f - No record for 1976-77 for "TRAMWAY MT STATION"
- L - Station relocated
- m - Mean seasonal data (years of record and accumulative totals) revised due to combining records with those of compatible discontinued stations, separation of incompatible records, etc.
- r - Station reestablished. No record for 1976-77, 1977-78 and 1978-79 seasons for "ROWLAND", "POZZERO CANYON", and "JOSHUA TREE LH RS"
- R - Revised
- s - Storage gages, annual total only not published

ACTIVE PRECIPITATION STATION CROSS INDEX /477 (NUMERICAL)

STATION NO.	STATION NAME	STATION NO.	STATION NAME	STATION NO.	STATION NAME
15/ 2E-31P01	RAYMOND FLAT	45/ 7U-02P02	CHASE & TAYLOR	55/ 2E-11P01	PINE COVE SDF
25/ 4U-05P01	MIRA LOMA NW DEPT	45/ 7U-12P01	UPPER FLAT	55/ 3F-05P01	MUMBER PARK FVNG
25/ 4U-11P01	CLM PAVN SDF	45/ 7U-17P01	OAK FLAT	55/ 3E-07P01	JOVILLWLD FJRF DPT
25/ 6U-26P01	PEOLEY SDF	45/ 6U-01P01	LAKE MATHEWS	55/ 5E-02P01	RANCHO MIRAGE R C
25/ 5U-07P01	WEST RIVERSTONE SDF	45/ 6U-07P01	CORONA SOUTH	55/ 5F-11P01	RANCHO MIRAGE SDF
25/ 5U-14P01	AVSD CM FLOOD CMY	45/ 6U-16P01	EL CERRITO SDF	55/ 5E-29P01	HAYSTACK-MNT
25/ 5U-16P01	RHODODX FIRE DEPT	45/ 6U-27P01	WILF ROSE R OFFICE	55/ 6F-10P01	PALM DESERT SDF
25/ 5U-23P01	RUBINCOX LAB	45/ 6U-27P02	WILD ROSE RANCH 57	55/ 7E-07P01	PERMUDA DUNES SDF
25/ 5U-34P01	EVSC FIRE STA **	45/ 5U-11P01	WESTERN MCD	55/ 7E-22P01	INDIO DATE GARDEN
25/ 4U-07P01	HIGHGROVE SDF	45/ 5U-12P01	CAJALCO SDF	55/ 7E-26P01	INDIO SDF
25/ 4U-24P01	DIGDON PASS	45/ 5U-13P01	GAVILAN SPRINGS	55/13E-28P01	HAYFIELD PUMP PLMT
25/ 4U-33P01	EVSP CITRUS EX STA	45/ 4U-33P01	GOOF MOPE	55/16E-05P01	DESERT CENTER
25/ 4U-33P01	UNIVERSITY CITY	45/ 3U-02P01	PERRIS ST PK	65/ 5U-02P01	ELSINORE ST PARK
25/ 3U-14P01	BECHF PANYON	45/ 3U-08P01	PERRIS RESERVOIR	65/ 5U-13P01	LAKELAND VILL SDF
25/ 2U-13P01	CALIFORNIA SDF	45/ 3U-30P01	PERRIS SDF HOOS	65/ 5U-16P01	EL CARISO STATION
25/ 2U-28P01	SPN TYPOTD CANYON	45/ 2U-18P01	NUVILW SDF	65/ 4U-02P01	R R CANYON DAM
25/ 1U-28P02	CHERRY VALLEY SDF	45/ 1U-09P01	GILMAN HOTSPRINGS	65/ 4U-07P01	ELSINORE SDF
25/ 1F-17P01	RAMMING PEACH NO-2	45/ 1U-15P01	WEST PORTAL	65/ 1E-08P01	CACTUS VALLEY
25/ 2F-14P02	WILLARD CYN-BATCHA	45/ 1F-02P01	POPFET FLATS	65/ 1E-23P01	RED MOUNTAIN
25/ 3E-12P01	MISSION CREEK	45/ 1F-02P01	BLACK MTN-YMCA	65/ 1E-25P01	WADEIGH RANCH
25/ 3F-22P01	W TROUT FARM	45/ 2E-26P01	LAWLER CO PARK	65/ 2E-10P01	MILKY SPRINGS
25/ 5F-3-0P01	DESERT HOT SPR SDF	45/ 3E-23P01	PT SAN JACINTO WSP	65/ 3E-04P01	MURKEY CREEK PARK
25/ 5E-3-0P02	DESERT HOT SPR W C	45/ 3E-23P02	TRAPWAY MT STA	65/ 3E-08P01	HFWET RESERVOIR
25/ 5E-3-0P01	JOSHUA TREE L S RS	45/ 4E-07P01	TRAMWAY VALLEY STA	65/ 4F-17P01	CAMP SCHERMAN
35/ 7U-11P01	CORONA SDF	45/ 4E-10P01	TACHEVAM DAM	65/ 6E-17P01	DEEP CANYON LAE
35/ 7U-21P01	BRADCO DAM	45/ 4E-13P01	PALM SPRGS F D #2	65/ 7E-06P01	LA GUINIA SDF
35/ 7U-24P02	TEMESCAL WTR CO	45/ 4E-15P01	PALM SPRGS F D #1	65/ 8E-20P01	THEPMAIR AIRPRT SDF
35/ 7U-24P03	CORONA FIRE DEPT	45/ 5F-19P01	DESERT WTR AGENCY	65/ 8E-20P02	THERMAL FAA A P
35/ 6U-04P02	MORCO FIRE DEPT	45/ 5E-33P01	CATHEDRAL CITY SDF	65/22E-31P01	FLYTHE AIRBASE SDF
35/ 6U-11P01	LA SIFARA FIRE STA	45/ 6F-18P01	THOUSAND PALMS SDF	65/23E-32P01	RLYTHE SDF
35/ 6U-15P01	FALL VALLEY	45/ 7F-11P01	INDIO HILLS MORLEY	75/ 4U-02P01	WILDOMAR
35/ 5U-04P01	ARLINGTON	45/ 15E-19P01	EAGLE MOUNTAIN	75/ 4U-03P01	HONELL RANCH
35/ 5U-21P01	MOCKINGBIRD RESERV	55/ 6U-03P01	GLFM IVY	75/ 4U-17P01	LA CRESTA
35/ 5U-25P02	WOODCREST SDF	55/ 6U-19P01	SANTIAGO PEAK	75/ 3U-17P02	MURRIETA SCS
35/ 5U-33P01	MARRISCAN DAM	55/ 4U-05P01	STEELE VALLEY E S	75/ 2U-10P01	SKINNER LAKE
35/ 4U-11P01	CUMMINGS SDF	55/ 3U-11P01	ROMOLAND	75/ 1U-12P02	SKINNER LAKE PARK
35/ 4U-11P01	EDGEMONT SDF	55/ 3U-21P01	SUN CITY SDF	75/ 3E-16P01	ANZA SDF
35/ 2U-26P01	WOLF VALLEY	55/ 3U-30P01	QUAIL VALLEY SDF	75/ 5F-13P01	PINYON FLAT SDF
35/ 1U-11P01	BRANDMONT	55/ 3U-32P01	SUA CITY SEWAGE	75/ 5F-26P01	SANTA ROSA MTN
35/ 1U-11P02	BRANDMONT IF	55/ 2U-03P01	JUNIPER FLATS	75/ 9E-08P01	MECCA SDF
35/ 1U-14P01	CHATTER CANYON	55/ 2U-17P01	HOMELAND	75/10E-34P01	NORTH SHORE SDF
35/ 1E-06P01	RENTON JATER CO	55/ 2U-27P01	WINCHESTER	75/22E-34P01	RIPLEY SDF
35/ 2F-16P01	CAPAZO	55/ 1U-13P01	MEYET	85/ 4U-29P02	FFLU7
35/ 2F-32P01	TWIN CANYON RANCH	55/ 1U-13P01	LITTLE LAKE SDF	85/ 3U-12P01	TEMPICULA SDF
35/ 2F-32P01	CROW REFER UFFEL	55/ 1U-17P01	RYAN AIR FIELD SDF	85/ 2U-30P01	PAJARON COTTAGE
35/ 4F-11P01	NORTH RLY SPP SDF			85/ 1E-28P 01	AGUANGA VALLEY
35/ 6F-16P01	WOLF CANYON DAM			85/ 2E- 08P 01	AGUANGA-BRAIFORD
				85/ 8E- 11P 01	ONASIS SDF

DISCONTINUED STATION INDEX /977- (ALPHABETICAL)

STATION NAME (3)	STATION NO.	LATITUDE	LONGITUDE	ELEV	EQUIPMENT TYPE (1)	FIRST YEAR (2)	OWNER	OPERATOR
AGUACAR-TOMPSON	85/ 1E-30P01	33-26-00	116-51-40	1986	8 STD	1900	NUS	PAUL THOMPSON
ANZA-CARTIER	75/ 3E-04P01	32-35-25	116-40-10	4650		1950	PRIVATE	CARTIER
APLINGTON MEIGHTS	35/ 5W-30P01	33-53-18	117-24-55	920	8 STD	1923	MFASLEY GROVE	F S MEASLEY
BANNING	35/ 1E-10P01	32-56-20	116-52-32	2305	8 STD	1930	MUC	MUC
BANNING BRANCH	25/ 1E-30P01	33-58-26	116-54-41	3600	8 STD	1975	USFS	USFS
BEAUMONT PUMP PLANT	25/ 1W-22P01	33-50-06	116-58-05	3045	8 STD	1910	NUS	B-CV WTR DIST
BROWN CAMP	45/ 2E-10P01	33-49-50	116-08-50	1875	8 STD	1930	NUS	MUC
BOX SPRINGS MTR	25/ 4W-27P01	33-57-43	117-16-47	3000	8 STD	1950	RVSU CO COMM DP	L M CLARAUGH
BUNNY CANYON RP	55/ 3W-20P01	33-38-24	117-12-51	1700	4 PLAS	1960	RCFCUUCD	R FRANCISCO
CAPAZAN SHAFT	35/ 2E-20P01	33-57-30	116-47-30	1800		1930	MUC	M R COONS
CAMUILLA	75/ 3E-21P01	33-32-30	116-44-36	3635	8 STD	1910	NUS	W L SHAWK
CAJALCO RD	45/ 5W-12P02	33-50-27	117-21-31	1430	8 STD	1930	MUC	MUC
CHERRY VALLEY-LEE	25/ 1W-27P01	33-56-19	116-58-24	2820	3 STD	1950	RCFCUUCD	RICHARD LEE
CORONA - STAS	45/ 7W-32P01	33-50-30	117-33-23	1020		1910	THOMAS STAS	THOMAS STAS
CORONA BARNES E 37	45/ 7W-12P02	33-40-57	117-33-32	1220	3 STD	1930		A C BARNES
CORONA FLORES	45/ 6W-05P01	33-50-45	117-32-08	850		1930	CORONA LEM CO	CORONA LEM CO
CORONA FLORES	35/ 7W-34P01	33-52-25	117-35-05	725		1930	CORONA LEM CO	CORONA LEM CO
CORONA FLORES	35/ 7W-34P01	33-51-55	117-34-02	700		1940	CORONA LEM CO	CORONA LEM CO
COTTONWOOD WASH	45/ 1E-10P01	33-44-40	115-46-35	3100	8 AUTO	1960	USGS	USGS
CRAYTE CANYON	45/ 5E-31P01	33-24-05	116-30-05	2275	STOR	1940	NUS	HOWARD BAILEY
CRESTVIEW	25/ 5W-03P01	34-01-47	117-23-36	1030	8 STD	1940	SECFCD	A M SMITH
DAWSON CANYON	45/ 6W-35P01	33-46-00	117-28-00	900		1880		
DECKERS RANCH	45/ 2E-26P02	33-49-00	116-45-00	9550	8 STD	1920	NUS	I W DECKER
ELSIPORE - PRAY (A)	45/ 5W-11P01	33-40-15	117-19-16	1312	4 PLAS	1970	RCFCUUCD	RONNIE PRAY
ELSIPORE ASE	65/ 4W-22P01	33-36-00	117-16-00	1450	8 AUTO	1940	NUS	P M ALBRIGHT
ELSIPORE ASSC	65/ 4W-22P01	33-37-08	117-18-37	1305	8 AUTO	1970	NUS	J L EYING
ELSIPORE-SHERMAN	55/ 5W-35P01	33-41-11	117-23-07	1372	8 STD	1910	F M SHERMAN	F M SHERMAN
GLENN AVEN	25/ 6W-02P01	34-06-44	117-29-11	750		1920	USDA	J P FREYDOZ
GOLD VALLEY RANCH	45/ 4W-30P01	33-47-34	117-20-20	2150		1930	MUC	R E JAMES
HAGANP RIDGE	45/ 7W-10P01	33-50-07	117-35-50	1200	8 AUTO	1970	USFS	USFS
HARRISON ARE 92	35/ 5W-32P02	33-47-11	117-35-51	3184	8 STD & AUTO	1960	USARS	USARS
HENDRICKS RANCH	35/ 3W-14P01	33-48-00	117-10-00	1550		1950	MORENO MUT WTR	O M SCOTT
LA SIERRA RANCH	55/ 1W-20P01	33-46-00	117-00-00	1550		1910	MUC	I F FARRAR
LAKE MATHEWS IS #1	45/ 5W-07P01	33-40-33	117-25-47	1300	8 STD	1940	MUC	MUC
LAKE MATHEWS SH #2	45/ 5W-10P01	33-40-00	117-23-00	1400		1940	MUC	MUC
LAKEVIEW	45/ 2W-08P01	33-40-00	117-07-00	1450		1910	MUC	J MCDOUGHER
LAURENCE ADIT	35/ 1E-28P01	33-57-00	116-57-34	2640		1930	MUC	M R COONS
LOS ALAMOS GREENUC	75/ 2W-15P01	33-34-01	117-04-28	1440		1910	M R GREENUCO	M R GREENUCO
LOS ALAMOS VALLEY	75/ 2W-12P01	33-36-00	117-01-50	1480		1930		
LOWRE RANCH	35/ 7W-34P01	33-51-40	117-35-37	450	5 MAN	1930	CORONA LEM CO	CORONA LEM CO
MARCH ARE	35/ 4W-25P01	33-52-00	117-15-40	1485	8 AUTO	1910	USAF	USAF
MAYNARD RANCH	35/ 1W-07P01	33-57-52	117-01-18	2000		1930	MUC	M MAYNARD
PILLARD CANYON	25/ 2E-32P01	33-47-05	116-49-03	2600		1920	MUC	MUC
PILLARD CANYON (B)	25/ 2E-16P01	33-40-30	116-47-05	3500	4 PLAS	1970	RCFCUUCD	EDNA PARGED

DISCONTINUED PRECIPITATION STATION INDEX 1977 (ALPHABETICAL)

STATION NAME (3)	STATION NO.	LATITUDE	LONGITUDE	ELEV (1)	EQUIPMENT TYPE	FIRST YEAR (2)	OWNER	OPERATOR
WHITEWATER CANYON	35/ 3F-02P01	33-42-50	116-38-22	1420	A STD	19200	MUS	CVCMD
WHITEWATER RANCH	35/ 3E-10P01	33-51-18	116-39-26	1210	A STD	19200	MUS	G HENKELRATH
WHITTIER CREEK	55/ 1F-14P01	33-44-00	116-51-00	1900	STD	19270	V R WEIR	V P WEIR
WILSON CREEK	75/ 1F-24P01	33-32-53	116-44-45	2900		19530		
WINCHESTER USNA	55/ 2W-26P01	33-42-45	117-03-50	1490		19400	USDA	

NOTES:

1. The number under equipment type denotes the catchment diameter in inches. Gage type codes are as follows:

STD - Standard MWS type gage (with inner measuring tube)
 PLAS - Plastic gage of standard design (with inner measuring tube)
 MAN - All non-standard type manual gages
 STOR - Storage gage

2. First year denotes first fiscal year, i.e., record beginning in November 1943 would show up as 1944.

3. Major revisions since last report are as follows:

INDEX CODES:

a - Station discontinued since last report (1975-76)
 R - Revised

DISCONTINUED PRECIPITATION STATION CROSS INDEX 1977
(NUMERICAL)

STATION NO.	STATION NAME	STATION NO.	STATION NAME	STATION NO.	STATION NAME
25/ 70-12P01	CHONA FARMES F 37	45/ 70-12P02	CHONA FARMES F 37	75/ 4W-35P01	SANTA ROSA RANCH
25/ 70-12P02	CORONA FLORES	45/ 70-12P03	CORONA FLORES	75/ 3W-14P01	MURRIETA MCT SPRGS
25/ 70-12P03	DAVISON CANYON	45/ 70-12P04	DAVISON CANYON	75/ 3W-14P02	MURRIETA DUP
25/ 70-12P04	LAKH MATHEWS JR #1	45/ 70-12P05	LAKH MATHEWS JR #1	75/ 3W-14P03	SANTA ROSA RCH GTE
25/ 70-12P05	LAKH MATHEWS SR #2	45/ 70-12P06	LAKH MATHEWS SR #2	75/ 3W-32P01	SANTA ROSA RCH E
25/ 70-12P06	CAJALCO #2	45/ 70-12P07	CAJALCO #2	75/ 2W-12P01	LOS ALAMOS VALLEY
25/ 70-12P07	VAL VERDE	45/ 70-12P08	VAL VERDE	75/ 2W-12P02	LOS ALAMOS GREENWD
25/ 70-12P08	GOLD VALLEY RANCH	45/ 70-12P09	GOLD VALLEY RANCH	75/ 2W-24P01	PAUPA RANCH STA A
25/ 70-12P09	PERRIS 1 USW	45/ 70-12P10	PERRIS 1 USW	75/ 1E-24P01	WILSON CREEK
25/ 70-12P10	PERRIS VALLEY DRAIN	45/ 70-12P11	PERRIS VALLEY DRAIN	75/ 2E-12P01	TRIPP FLATS
25/ 70-12P11	LAKH VILLO	45/ 70-12P12	LAKH VILLO	75/ 2E-27P01	MURCELL RANCH
25/ 70-12P12	SAN JACINTO	45/ 70-12P13	SAN JACINTO	75/ 3E-04P01	ANZA-CARTIER
25/ 70-12P13	SAN JACINTO RESERVOIR	45/ 70-12P14	SAN JACINTO RESERVOIR	75/ 3E-31P01	CAMUILLA
25/ 70-12P14	SAN JACINTO	45/ 70-12P15	SAN JACINTO	75/ 5E-18P01	PALM CANYON TRIP
25/ 70-12P15	SAN JACINTO	45/ 70-12P16	SAN JACINTO		
25/ 70-12P16	SAN JACINTO	45/ 70-12P17	SAN JACINTO		
25/ 70-12P17	SAN JACINTO	45/ 70-12P18	SAN JACINTO		
25/ 70-12P18	SAN JACINTO	45/ 70-12P19	SAN JACINTO		
25/ 70-12P19	SAN JACINTO	45/ 70-12P20	SAN JACINTO		
25/ 70-12P20	SAN JACINTO	45/ 70-12P21	SAN JACINTO		
25/ 70-12P21	SAN JACINTO	45/ 70-12P22	SAN JACINTO		
25/ 70-12P22	SAN JACINTO	45/ 70-12P23	SAN JACINTO		
25/ 70-12P23	SAN JACINTO	45/ 70-12P24	SAN JACINTO		
25/ 70-12P24	SAN JACINTO	45/ 70-12P25	SAN JACINTO		
25/ 70-12P25	SAN JACINTO	45/ 70-12P26	SAN JACINTO		
25/ 70-12P26	SAN JACINTO	45/ 70-12P27	SAN JACINTO		
25/ 70-12P27	SAN JACINTO	45/ 70-12P28	SAN JACINTO		
25/ 70-12P28	SAN JACINTO	45/ 70-12P29	SAN JACINTO		
25/ 70-12P29	SAN JACINTO	45/ 70-12P30	SAN JACINTO		
25/ 70-12P30	SAN JACINTO	45/ 70-12P31	SAN JACINTO		
25/ 70-12P31	SAN JACINTO	45/ 70-12P32	SAN JACINTO		
25/ 70-12P32	SAN JACINTO	45/ 70-12P33	SAN JACINTO		
25/ 70-12P33	SAN JACINTO	45/ 70-12P34	SAN JACINTO		
25/ 70-12P34	SAN JACINTO	45/ 70-12P35	SAN JACINTO		
25/ 70-12P35	SAN JACINTO	45/ 70-12P36	SAN JACINTO		
25/ 70-12P36	SAN JACINTO	45/ 70-12P37	SAN JACINTO		
25/ 70-12P37	SAN JACINTO	45/ 70-12P38	SAN JACINTO		
25/ 70-12P38	SAN JACINTO	45/ 70-12P39	SAN JACINTO		
25/ 70-12P39	SAN JACINTO	45/ 70-12P40	SAN JACINTO		
25/ 70-12P40	SAN JACINTO	45/ 70-12P41	SAN JACINTO		
25/ 70-12P41	SAN JACINTO	45/ 70-12P42	SAN JACINTO		
25/ 70-12P42	SAN JACINTO	45/ 70-12P43	SAN JACINTO		
25/ 70-12P43	SAN JACINTO	45/ 70-12P44	SAN JACINTO		
25/ 70-12P44	SAN JACINTO	45/ 70-12P45	SAN JACINTO		
25/ 70-12P45	SAN JACINTO	45/ 70-12P46	SAN JACINTO		
25/ 70-12P46	SAN JACINTO	45/ 70-12P47	SAN JACINTO		
25/ 70-12P47	SAN JACINTO	45/ 70-12P48	SAN JACINTO		
25/ 70-12P48	SAN JACINTO	45/ 70-12P49	SAN JACINTO		
25/ 70-12P49	SAN JACINTO	45/ 70-12P50	SAN JACINTO		
25/ 70-12P50	SAN JACINTO	45/ 70-12P51	SAN JACINTO		
25/ 70-12P51	SAN JACINTO	45/ 70-12P52	SAN JACINTO		
25/ 70-12P52	SAN JACINTO	45/ 70-12P53	SAN JACINTO		
25/ 70-12P53	SAN JACINTO	45/ 70-12P54	SAN JACINTO		
25/ 70-12P54	SAN JACINTO	45/ 70-12P55	SAN JACINTO		
25/ 70-12P55	SAN JACINTO	45/ 70-12P56	SAN JACINTO		
25/ 70-12P56	SAN JACINTO	45/ 70-12P57	SAN JACINTO		
25/ 70-12P57	SAN JACINTO	45/ 70-12P58	SAN JACINTO		
25/ 70-12P58	SAN JACINTO	45/ 70-12P59	SAN JACINTO		
25/ 70-12P59	SAN JACINTO	45/ 70-12P60	SAN JACINTO		
25/ 70-12P60	SAN JACINTO	45/ 70-12P61	SAN JACINTO		
25/ 70-12P61	SAN JACINTO	45/ 70-12P62	SAN JACINTO		
25/ 70-12P62	SAN JACINTO	45/ 70-12P63	SAN JACINTO		
25/ 70-12P63	SAN JACINTO	45/ 70-12P64	SAN JACINTO		
25/ 70-12P64	SAN JACINTO	45/ 70-12P65	SAN JACINTO		
25/ 70-12P65	SAN JACINTO	45/ 70-12P66	SAN JACINTO		
25/ 70-12P66	SAN JACINTO	45/ 70-12P67	SAN JACINTO		
25/ 70-12P67	SAN JACINTO	45/ 70-12P68	SAN JACINTO		
25/ 70-12P68	SAN JACINTO	45/ 70-12P69	SAN JACINTO		
25/ 70-12P69	SAN JACINTO	45/ 70-12P70	SAN JACINTO		
25/ 70-12P70	SAN JACINTO	45/ 70-12P71	SAN JACINTO		
25/ 70-12P71	SAN JACINTO	45/ 70-12P72	SAN JACINTO		
25/ 70-12P72	SAN JACINTO	45/ 70-12P73	SAN JACINTO		
25/ 70-12P73	SAN JACINTO	45/ 70-12P74	SAN JACINTO		
25/ 70-12P74	SAN JACINTO	45/ 70-12P75	SAN JACINTO		
25/ 70-12P75	SAN JACINTO	45/ 70-12P76	SAN JACINTO		
25/ 70-12P76	SAN JACINTO	45/ 70-12P77	SAN JACINTO		
25/ 70-12P77	SAN JACINTO	45/ 70-12P78	SAN JACINTO		
25/ 70-12P78	SAN JACINTO	45/ 70-12P79	SAN JACINTO		
25/ 70-12P79	SAN JACINTO	45/ 70-12P80	SAN JACINTO		
25/ 70-12P80	SAN JACINTO	45/ 70-12P81	SAN JACINTO		
25/ 70-12P81	SAN JACINTO	45/ 70-12P82	SAN JACINTO		
25/ 70-12P82	SAN JACINTO	45/ 70-12P83	SAN JACINTO		
25/ 70-12P83	SAN JACINTO	45/ 70-12P84	SAN JACINTO		
25/ 70-12P84	SAN JACINTO	45/ 70-12P85	SAN JACINTO		
25/ 70-12P85	SAN JACINTO	45/ 70-12P86	SAN JACINTO		
25/ 70-12P86	SAN JACINTO	45/ 70-12P87	SAN JACINTO		
25/ 70-12P87	SAN JACINTO	45/ 70-12P88	SAN JACINTO		
25/ 70-12P88	SAN JACINTO	45/ 70-12P89	SAN JACINTO		
25/ 70-12P89	SAN JACINTO	45/ 70-12P90	SAN JACINTO		
25/ 70-12P90	SAN JACINTO	45/ 70-12P91	SAN JACINTO		
25/ 70-12P91	SAN JACINTO	45/ 70-12P92	SAN JACINTO		
25/ 70-12P92	SAN JACINTO	45/ 70-12P93	SAN JACINTO		
25/ 70-12P93	SAN JACINTO	45/ 70-12P94	SAN JACINTO		
25/ 70-12P94	SAN JACINTO	45/ 70-12P95	SAN JACINTO		
25/ 70-12P95	SAN JACINTO	45/ 70-12P96	SAN JACINTO		
25/ 70-12P96	SAN JACINTO	45/ 70-12P97	SAN JACINTO		
25/ 70-12P97	SAN JACINTO	45/ 70-12P98	SAN JACINTO		
25/ 70-12P98	SAN JACINTO	45/ 70-12P99	SAN JACINTO		
25/ 70-12P99	SAN JACINTO	45/ 70-12P00	SAN JACINTO		

6. Index of precipitation gages, San Bernardino County, with location map. Courtesy of Art Luther, San Bernardino County Flood Control and Water Conservation District. (Followed by typical data sheets)

RAINFALL STATION INDEX SAN BERNARDINO COUNTY

STATION NO.	STATION NAME	TYPE	N. LAT.	W. LONG.	T. R. S.	ELEV. FEET	RECORD YEARS	AVER. YEARLY	OBSERVER
1B2	San Bernardino F.C.D.	SD-8	34°06'16"	117°16'05"	1S 4W 11B	1042	31	12.65	S.B.C.F.C.D. (Outside)
2A	San Timoteo	SD-8	33°58'46"	117°07'29"	2S 2W 19R	1846	23	13.10	Mrs. J.A. DeWitt
4A	Rialto	ID-5	34°06'24"	117°21'50"	1S 5W 11K	1220	20	13.64	Marvin Henry
5A	Declez	SD-8	34°04'40"	117°28'14"	1S 6W 13N	1107	31	13.81	C.D.F.
9A	Reche Canyon	SD-8	33°58'45"	117°14'02"	2S 3W 18K	2030	22	12.37	N.E. Manton
11C	Devore	SP-8	34°12'53"	117°23'50"	2N 5W 27E	2540	11	28.14	Gail Wilmuth
14A	Oak Glen	RD-8	34°03'15"	116°57'20"	1S 1W 26K	4680	6	29.26	S.B.C.F.C.D.
16A	Cajon Junction	SD-RD-8	34°28'31"	117°28'31"	3N 6W 26Q	3118	31	16.79	C.D.H.
17	Fontana 5N	SU-RD-8	34°10'57"	117°26'31"	1N 5W 7Q	1972	48	25.45	R.W. Getchell
19A	Upland	SD-RD-8	34°07'35"	117°40'50"	1N 8W 35J	1609	32	18.69	Tommy Chappell
20C	Chino Fire #2	SD-RD-8	35°59'00"	117°43'20"	2S 8W 16R	655	31	14.13	C.R.F.P.D.
21A	Mira Loma	RD-8	34°01'46"	117°31'47"	2S 6W 5F	827	31	11.46	S.B.C.F.C.D.
23	Redlands	RD-8	34°02'04"	117°12'30"	1S 3W 32R	1282	6	12.92	S.B.C.F.C.D.
24C	Crafton	RD-8	34°02'30"	117°07'28"	1S 2W 31H	2000	6	14.04	Raymond Schneider
25	East Highlands	SP-RD-8	34°07'16"	117°10'18"	1N 3W 35P	1512	64	17.89	E. Highlands Orange
26	Ontario Fire Sta.	SD-RD-8	34°03'55"	117°38'47"	1S 7W 30B	1003	88	16.74	Ontario Fire Dept.
27A	Colton Fire Dept.	SD-RD-8	34°04'16"	117°19'08"	1S 4W 20G	990	14	10.63	Colton Fire Dept.
28	Day Canyon	SD-RD-8	34°10'30"	117°32'11"	1N 6W 17E	2576	24	24.27	S.B.C.F.C.D.
29	Beaumont	SU-8	33°55'45"	116°58'45"	3S 1W 10D	2610	80	17.89	Beaumont Irrig. Dist.
30	Beaumont Pump Plant	SU-8	33°59'00"	116°58'00"	2S 1W 23M	3045	63	20.78	Beaumont Irrig. Dist.
32	Big Bear Lake Dam	RU-8	34°14'30"	116°58'30"	2N 1W 22L	6815	91	37.46	S.B.C.F.C.D.
33	Wrightwood	SD-RD-8	34°22'17"	117°29'00"	3N 7W 8K	6038	18	18.95	Wrightwood C.F.D.
34	Claremont College	RU-SU-8	34°05'48"	117°42'33"	1S 8W 10L	1201	83	17.47	Brackett Observatory
35	Corona	SU-8	33°52'58"	117°34'07"	3S 7W 25K	610	66	12.49	Corona Fire Dept.
37	Lytle Creek Rngr. Sta.	RU-SU-8	34°13'50"	117°28'25"	2N 6W 26F	2730	38	33.42	U.S. Forest Service

RAINFALL STATION INDEX

STATION NO.	STATION NAME	TYPE	N. LAT.	W. LONG.	T.	R.	S.	ELEV. FEET	RECORD YEARS	AVER. YEARLY	OBSERVER
38	Beaumont 1E	RU-SU-8	33°56'00"	116°57'00"	3S	1W	11	2589	33	15.50	B.L. Tate
40	Pomona	SU-8	34°05'00"	117°46'00"	1S	8W	19H	855	97	18.14	J.E. Adamson
41	Carbon Canyon	SU-8	34°05'00"	117°48'00"	3S	9W	12	1775	19	12.20	U.S. C of E
42	Corona C.D.F.	SP-8	33°54'10"	117°33'38"	3S	7W	13R	617	24	10.26	C.D.F.
47	Squirrel Inn #2	SD-8	34°13'40"	117°14'50"	2N	4W	25J	6040	43	39.63	Leon F. Voorhies
48A	29 Palms Nat. Park	SU-8	34°07'45"	116°02'15"	1N	9E	33J	1975	39	3.81	U.S. Park Service
51	Big Pines Park	RD-8	34°22'45"	117°41'30"	3N	8W	2F	6860	49	24.79	U.S.F.S.
52	Cajon West Summit	RU-8	34°23'30"	117°34'35"	4N	7W	35J	4838	32	9.28	S.B.C.F.C.D.
54A	Mt. Baldy	RD-8	34°14'12"	117°39'32"	2N	7W	19P	4320	54	32.77	L.A.C.F.C.D.
58	Crafton - Mentone	SU-8	34°04'10"	117°07'50"	1S	2W	19L	1650	47	15.38	Mentone B.G.O. Co.
59	Needles Pumping Plant	SD-8	34°41'17"	114°36'45"	7N	23E	19G	1400	11	4.57	So. Cal. Gas Co.
60	Prado Dam	RU-8	33°53'30"	117°38'10"	3S	7W	20Q	560	32	11.91	U.S. C of E
61	Riverside Citrus Exp.	RU-SU-8	33°58'02"	117°20'40"	2S	4W	30P	1045	50	10.53	U.C., Riverside
63	Mountain Pass	SU-8	35°28'20"	115°32'40"	16N	13E	14J	4735	18	7.19	Mt. Pass Srv. Sta.
65A	Riverside Co. F.C.D.	SU-RU-8	34°00'10"	117°22'40"	2S	5W	14P	845	34	10.53	R.C.F.C.D. & W.C.D.
67	Chino Sub Station	SU-8	33°59'50"	117°40'40"	2S	8W	13E	670	47	14.52	S.C.E.
70A	Green Canyon Spgs.	SD-8	34°14'00"	116°48'10"	2N	2E	29D	7000	11	15.04	W.R. Hornbeck
71	Devil Canyon Gate	SP-8	34°12'06"	117°19'58"	1N	4W	6H	1880	47	23.25	S.B. City Wtr. Dept.
75	Guasti Winery	RD-8	34°02'39"	117°35'02"	1S	7W	23L	975	61	15.19	S.B.C.F.C.D.
77	Mill Creek Rngr. Sta.	SP-8	34°04'45"	117°02'47"	1S	2W	13P	2980	10	18.92	U.S. Forest Service
79	Chino	SD-8	34°58'30"	117°35'38"	2S	7W	27A	642	46	12.00	Oscar Imbach
85	San Antonio Heights	SU-8	34°09'25"	117°39'03"	1N	7W	19L	1901	83	21.84	C.D.F.
86	San Bdn. Hanford	SU-8	34°06'15"	117°17'20"	1S	4W	10F	1030	45	13.84	S.B. City Wtr. Dept.
88	Upland 3N	SP-8	34°07'58"	117°28'27"	1N	7W	31H	1607	43	19.57	Liberty Groves Corp.
89A	Adelanto	SD-8	34°34'30"	117°24'50"	6N	5W	28L	2875	31	4.24	Frank Ebert

RAINFALL STATION INDEX

STATION NO.	STATION NAME	TYPE	N. LAT.	W. LONG.	T.	R.	S.	ELEV. FEET	RECORD YEARS	AVER. YEARLY	OBSERVER
90	Big Bear Lake F.D.	SD-8	34°14'40"	116°54'35"	2N	1E	20E	6745	24	22.33	Big Bear Lake C.F.D.
91A	Big Bear City	SD-8	34°15'40"	116°50'30"	2N	1E	14A	6800	19	11.69	Big Bear Mut. Serv.
92	Hesperia	SD-8	34°25'16"	117°18'12"	4N	4W	21B	3195	43	7.14	Roy Walters
96	Victorville	RU-8	34°32'00"	117°17'45"	5N	4W	9J	2840	50	5.09	Victorville Co. W.D.
98	Upland Co. Yard	ID-5	34°05'43"	117°37'42"	1S	7W	8J	1215	17	16.02	S.B. Co. Rd. Dept.
102A	Yucca Valley	SD-8	34°07'27"	116°24'30"	1N	5E	36R	3230	17	6.15	J.W. Yale
107	Arrowhead Ranger Sta.	ID-5RD-8	34°14'20"	117°11'25"	2N	3W	27D	5593	17	40.59	U.S.F.S.
110	Needles F.A.A.	SU-8	34°45'45"	114°36'30"	8N	23E	30C	883	34	4.14	F.A.A.
111	Trona	SU-8	35°45'40"	117°22'40"	25S	43E	17F	1656	54	3.88	Amer. Pot. & Chem.
112A	Barstow	SD-8	34°53'56"	117°01'32"	9N	1W	6G	2142	57	4.08	Barstow Fire Dept.
113	Daggett F.A.A.	SU-8	34°51'10"	116°47'50"	9N	2E	20G	1922	28	3.37	F.A.A.
114	Iron Mountain	RU-SU-8	34°09'00"	115°07'30"	1N	18E	30H	938	40	3.00	M.W.D.
118	Devore	SD-8	34°13'11"	117°24'10"	2N	5W	33B	2080	24	25.98	C.D.F.
119	Etiwanda 1N	SU-8	34°07'57"	117°31'24"	1N	6W	32H	1380	91	19.92	C.D.F.
120	Mentone C.D.F.	ID-5	34°04'15"	117°07'27"	1S	2W	20E	1765	24	12.75	C.D.F.
122	Oak Glen	SP-8	34°03'18"	116°57'15"	1S	1W	27K	4040	22	22.59	P.H. Wagner
124	Rubidoux Lab.	SU-8	33°58'48"	117°23'22"	2S	5W	22P	850	40	10.49	U.S. Dept. of Ag.
125	West Riverside C.D.F.	SU-8	34°00'44"	117°26'48"	2S	5W	7F	880	26	10.79	C.D.F.
126A	Calimesa, East	SP-8	34°00'16"	117°01'00"	2S	1W	18A	2813	10	18.66	So. Mesa Wtr. Co.
128B	Yucaipa	SD-8	34°01'15"	117°02'20"	2S	2W	1Q	2565	5	11.60	Tom Zeich
129	Yucapia	SP-8	34°02'00"	117°02'12"	2S	2W	1A	2660	24	15.35	C.D.F.
130	Panorama Point	SU-8	34°13'31"	117°18'32"	2N	4W	28N	3775	40	30.93	C.D.H.
132	Yucaipa Wat-r Co.	SD-RD-8	34°02'15"	117°02'10"	1S	2W	36Q	2710	23	15.86	S.B.V.M.W.D.
134B	Joshua Tree	SU-8	34°08'00"	116°17'30"	1N	6E	25N	2720	21	4.22	Joshua Basin W.D.
135A	Morongo Valley	SU-8	34°03'00"	116°34'42"	1S	4E	28N	2570	24	8.18	M.V.C.S.D.

RAINFALL STATION INDEX

STATION NO.	STATION NAME	TYPE	N. LAT.	W. LONG.	T. R. S.	ELEV. FEET	RECORD YEARS	AVER. YEARLY	OBSERVER
136	Apple Valley	SP-8	34°31'25"	117°12'30"	5N 3W 17G	2930	18	4.10	Apple Valley Ranchos
137	Montclair Fire Dept.	SD-8	34°03'41"	117°41'16"	1S 8W 26B	965	18	14.76	Montclair Fire Dept.
138	Fontana Kaiser	SP-8	34°04'40"	117°30'20"	1S 6W 21A	1090	23	13.83	Kaiser Steel Corp.
139	Kee Ranch	SU-8	34°09'45"	116°32'30"	1N 4E 14P	4325	26	7.37	U.S. C of E
140	Lake Arrowhead	SU-8	34°14'55"	117°11'10"	2N 3W 22E	5205	82	37.33	Lake Arrowhead C.F.D.
141	Pigeon Pass	SU-8	33°58'41"	117°15'07"	2S 4W 23P1	1850	16	10.30	R.C.F.C.D.
144	Redlands U.S.W.B.	SU-8	34°03'10"	117°11'20"	1S 3W 29E	1335	85	13.86	Redlands Daily Facts
145	Riverside Fire Sta. 3	SU-8	33°57'15"	117°23'45"	2S 5W 34L	820	94	10.59	Riverside Fire Dept.
146	S.B. County Hospital	SU-8	34°08'05"	117°16'35"	1N 4W 34K	1125	104	16.29	S.B. Co. Hosp.
150	Amboy	SU-8	34°33'30"	115°45'10"	5N 12E 5D	624	20	2.04	George Summers
151	Carbon Canyon - Workman	SU-8	33°56'30"	117°37'30"	2S 9W 34R	1175	25	14.99	U.S. C of E
153	Daggett IENE	RU-8	34°51'57"	115°52'07"	9N 1E 15N	1975	19	2.90	Coolwater Ranch
154	San Dimas	SU-8	34°06'15"	117°48'15"	1S 9W 11D	960	47	17.66	L.A.C. Fire Warden
155	Mill Creek Intake #3	RU-8	34°05'00"	116°59'16"	1S 1W 13B	4960	42	25.82	S.C.E. Co.
156	Needles	RU-8	34°50'05"	114°36'07"	9N 23E 32C	380	72	4.13	N.O.A.A.
157	San Dimas	RU-8	34°12'15"	117°45'30"	1N 8W 6C	2745	46	26.18	U.S.F.S.
158	Raywood Flats	SU-8	34°02'45"	116°48'50"	1S 2E 31D	7100	55	33.37	R.C.F.C. & W.C.D.
159	Lytile Creek-Foothill	RD-8	34°06'30"	117°19'55"	1S 4W 6R	1184	26	13.81	S.B.C.F.C.D.
160	Baker	SU-5	35°16'15"	116°04'10"	14N 9E 30L	940	20	2.52	City of Baker
162	Santa Ana #3	RU-8	34°06'25"	117°06'00"	1S 2W 4N	1980	68	18.52	S.C.E. Co.
164	Cabazon	SP-5	33°54'40"	116°47'00"	3S 2E 16G	1815	41	12.31	James A Wakeland
165	Upland Fire Sta. #1	SD-8	34°05'55"	117°38'53"	1S 7W 7A	1275	9	16.66	Upland Fire Dept.
166	San Bdn. Newmark Plant	SU-8	34°10'21"	117°18'44"	1N 4W 15C	1407	47	18.67	S.B. City Wtr. Dpt.
169B	Summit Valley	SU-8	34°18'16"	117°23'12"	3N 5W 25J	3280	10	21.93	A.F. Rentfro
170A	Patton - George	SD-8	34°08'16"	117°12'00"	1N 3W 29R	1370	11	16.60	Stuart M. George

RAINFALL STATION INDEX

STATION NO.	STATION NAME	TYPE	N. LAT.	W. LONG.	T. R. S.	ELEV. FEET	RECORD YEARS	AVER. YEARLY	OBSERVER
173B	Forest Falls	SP-8	34°04'40"	116°54'20"	1S 1E	17P 5270	35	31.98	A.A. Sterling
175	Alta Loma	SD-8	34°07'25"	117°36'27"	1N 7W	23K 1865	22	18.81	Mrs. Forney
176	Crestline Co. Yd.	SU-5	34°14'10"	117°17'42"	2N 4W	28A 4920	14	32.17	S.B. Co. Rd. Dept.
177A	Arlington Gage Canal	SP-8	33°53'49"	117°24'54"	3S 5W	21M 1007	36	9.24	Robert Schulte
178	Needles County Yard	SD-8	34°50'05"	114°35'55"	9N 23E	32B 451	14	3.86	S.B. Co. Rd. Dept.
180	Del Rosa	RD-8	34°09'42"	117°14'58"	1N 4W	24G 1460	6	20.76	S.B.C.F.C.D.
181	Crestline S.E.	RD-8	34°14'00"	117°16'59"	2N 4W	27G 5160	18	36.07	N.J. Tanguay
184A	Running Springs	RU-8	34°12'16"	117°06'05"	1N 2W	4H 6230	37	38.87	C.D.H.
185	Colton Substation	SU-8	34°03'22"	117°19'28"	1S 4W	29B 940	47	15.30	S.C.E. Co.
186	Corona Foothill #1	SP-8	33°50'39"	117°34'36"	4S 7W	2Q 1050	44	14.34	Charles Colladay
192	Cucamonga Wtr. Dist.	SP-8	34°07'28"	117°35'36"	1S 7W	3R 1225	51	17.33	Cucamonga Wtr. Dist.
193A	Kelso	SD-8	35°00'47"	115°39'05"	11N 12E	25B 2148	7	2.71	Lena Finnell
194	Fontana Union W.C.	SP-8	34°06'00"	117°26'14"	1S 5W	7W 1280	49	15.77	Bert Lutz
195	Hesperia C.D.F.	SD-8	34°25'17"	117°17'56"	4N 4W	21H 3175	18	6.44	C.D.F.
197	Lytle Creek - F.U.W.C.	SP-8	34°12'16"	117°26'58"	1N 5W	6E 2360	49	31.23	Fontana Union Wtr. Co
198	Lytle Creek-S.B.W.D.	SP-8	34°07'26"	117°20'53"	1N 4W	31N 1225	48	16.17	S.B. City Wtr. Dept.
204	Colton County Yard	SD-5	34°04'10"	117°20'32"	1S 4W	19 1020	17	12.98	S.B.C.F.C.D.
205	Phelan C.D.F.	SD-8	34°25'20"	117°34'20"	4N 7W	24E 4160	18	6.56	C.D.F.
206	Fontana Co. Yd.	RD-8	34°06'00"	117°25'02"	1S 5W	8H 1275	17	14.17	S.B. Co. Rd. Dept.
208	Lake Mathews Dam	SD-8	33°51'09"	117°27'15"	4S 6W	2J 1400	36	9.10	M.W.D.
215	Mitchell Caverns	SU-8	34°56'35"	115°30'45"	10N 14E	21H 4306	17	6.97	C.D.B.P.
216	29 Palms Co. Yd.	SD-RD-8	34°09'00"	116°03'15"	1N 9E	20R 1895	14	3.07	S.B. Co. Rd. Dept.
218	Fontana Herald News	ID-5	34°06'03"	117°26'04"	1S 5W	8E 1278	15	14.13	Herald News
219	Barstow Co. Yd.	SD-8	34°55'05"	117°01'26"	10N 1W	32D 2120	14	3.27	S.B. Co. Rd. Dept.
220	Pilot Rock Cons. Camp	SP-8	34°16'20"	117°17'10"	2N 4W	10K 3688	14	31.69	C.D.F.

RAINFALL STATION INDEX

STATION NO.	STATION NAME	TYPE	N. LAT.	W. LONG.	T.	R.	S.	ELEV. FEET	RECORD YEARS	AVER. YEARLY	OBSERVER
222	Highgrove Steam Plant	SD-RD-8	34°00'25"	117°19'45"	2S	4W	6J	945	13	11.28	S.C.E. Co.
223	Ivanpah Co. Yard	RD-SD-8	35°23'20"	115°15'20"	15N	15E	13G	2927	10	3.04	S.B. Co. Rd. Dept.
224	Cushenberry Springs	SD-8	34°21'30"	116°51'25"	3N	1E	10H	4250	13	8.38	Kaiser Permanente
225	Stoddard Valley	SD-8	34°45'30"	117°00'35"	8N	1W	29F	2865	13	3.82	O.W. Osborn
226	Ontario Sheriff Sta.	RD-8	34°05'08"	117°40'06"	1S	8W	14G	1153	13	15.02	S.B.C.F.C.D.
227A	El Mirage Airport	SU-8	34°37'20"	117°36'15"	6N	7W	10L	2863	10	4.66	Geo. Tweed
228	Kramer Junction	SD-8	34°59'20"	117°32'20"	10N	6W	5M	2477	12	3.46	Cal Trans
230	Trona Co. Yd.	SD-8	35°41'50"	117°23'45"	25S	43E	31M	1640	10	3.82	Glenn R. Goins
233	Yermo Inspect. Sta.	SD-8	34°55'30"	116°48'10"	10N	2E	31R	1912	12	3.07	C.D.A.
236	Fontana Sewage Plant	SD-RD-8	34°02'30"	117°27'50"	1S	6W	36E	960	11	12.76	City of Fontana
239	Redlands Co. Club	SD-RD-8	34°01'09"	117°08'55"	2S	3W	12C	2080	10	13.72	H.P. Hinkley
241	Randsburg	SU-8	35°22'05"	117°39'15"	29S	40E	35K	3570	37	5.60	Kern Co. Fire Dept.
242	Pedley C.D.F.	SP-3	33°58'31"	117°29'07"	2S	6W	26D	695	20	10.29	C.D.F.
243	Boron	RU-8	35°00'00"	117°39'00"	11N	7W	31R	2455	15	3.74	Kern Co. F.D.
245	Dale Dry Lake	SD-8	34°09'55"	115°44'30"	1N	12E	17Q	1220	12	2.12	Helen Santos
246	La Sierra C.D.F.	SP-3	34°55'07"	117°29'18"	3S	6W	10Q	714	19	8.86	C.D.F.
247	Sunnymead C.D.F.	SP-3	33°56'22"	117°14'50"	3S	4W	1H	1641	19	10.07	C.D.F.
249	Highgrove C.D.F.	SU-3	34°00'55"	117°19'58"	2S	4W	7H	945	19	10.46	C.D.F.
250	Calimesa C.D.F.	SU-3	34°00'12"	117°03'29"	2S	2W	14B	2405	17	15.83	C.D.F.
251	Cherry Valley C.D.F.	SU-3	34°58'22"	116°58'20"	2S	1W	27C	2880	19	18.10	C.D.F.
255	Johnson Valley	SD-8	34°25'10"	116°26'40"	4N	4E	19M	2794	14	3.61	Mrs. Shehorn
256	Alta Loma	SD-8	34°07'20"	117°35'05"	1N	7W	34R	1384	8	19.51	Mrs. H. Robertds
258	Loma Linda	SD-8	34°02'48"	117°15'39"	1S	4W	35A	1185	8	12.09	Dr. John Roos
259	Heart Bar St. Park	SD-8	34°09'34"	116°47'43"	1N	2E	20F	6688	8	17.32	C.D.B.P.
260	Camp Angelus	SD-8	34°09'00"	116°58'40"	1N	1W	27D	5780	34	31.43	Janet Loenhorst

RAINFALL STATION INDEX

STATION NO.	STATION NAME	TYPE	N. LAT.	W. LONG.	T.	R.	S.	ELEV. FEET	RECORD YEARS	AVER. YEARLY	OBSERVER
261A	Reche Canyon	SD-8	34°02'30"	117°16'50"	1S	4W	34H	1125	22	12.37	Henderson
262	Chino Fire	SD-8	34°00'14"	117°43'32"	2S	8W	11G	730	83	14.97	C.R.F.P.D.
264	Green Valley	SD-8	34°14'22"	117°04'42"	2N	2W	22P	6900	14	33.29	R.J. Eichelberger
268	Arrowhead Springs	SD-RD-8	34°11'10"	117°15'50"	1N	4W	11J	1980	20	21.90	S.B.C.F.C.D.
273	Loma Linda Victoria	SU-8	34°04'52"	117°15'18"	1S	4W	13N	1063	72	13.33	Riverside Water Co.
275	San Dimas	SU-8	34°07'42"	117°46'42"	1N	9W	36F	1215	46	26.18	A.L. Stevens
276	Rim of the World	RD-8(T)	34°14'10"	117°10'35"	2N	3W	27B	5850	5	25.83	S.B.C.F.C.D.
279	Deer Creek	RD-8(T)	34°10'45"	117°34'00"	1N	7W	12P	2860	-	-	S.B.C.F.C.D.
280	Lake Arrowhead F.S. #4	RD-8	34°15'40"	117°12'10"	2N	3W	16E	5205	4	30.08	Station Personnel
281	Lake Arrowhead F.S. #2	SD-8	34°15'45"	117°10'50"	2N	3W	15D	5200	2	32.88	Station Personnel
282	Redlands	SD-4	34°01'56"	117°11'25"	2S	3W	3D	1532	4	10.94	J.C. Funk
283	Fallsdale	RD-8(T)	34°04'55"	116°54'20"	1S	1E	17K	5990	3	28.14	S.B.C.F.C.D.
284	Crestline F.S.	SP-8	34°14'15"	117°17'20"	2N	4W	22L	4880	7	30.32	C.D.F.
286	Lytle Creek F.D.	RD-8(T)	34°15'30"	117°29'50"	2N	6W	15L	3400	3	18.30	S.B.C.F.C.D.
290	Upland F.D. #2	SD-8	34°08'15"	117°40'10"	1N	7W	30N	1800	2	19.86	City of Upland
295	Chino Co. Yard	SD-8	34°01'15"	117°41'15"	2S	8W	11G	727	47	14.52	S.B. Co. Rd. Dept.
296	Lost Horse Rngr. Sta.	SU-8	34°01'00"	116°11'30"	2S	8E	7C	4500	-	-	U.S.P.S.
297	Norton A.F.B.	SU-8	34°05'50"	117°14'30"	1S	3W	7M	1095	21	12.43	A.F. Weather Personr
298	Amboy - Saltus #1	SP-8	34°31'50"	115°41'40"	5N	12E	11P	625	8	2.28	Leslie Salt
300	Amboy - Saltus #2	SD-8	34°28'30"	115°44'30"	5N	13E	32R	595	2	1.99	Leslie Salt
301	Hinkley - 4E	SD-5	34°56'15"	117°07'45"	10N	2W	19P	2195	2	3.32	L.W. Dudley
302	Yucaipa - Orchid	SP-5	34°01'00"	117°02'10"	2S	2W	12A	2610	3	13.44	H. Purkapile
303	Sierra P.H.	SU-8	34°12'30"	117°40'20"	1N	8W	1C	2750	23	30.69	S.C.E. Co.
304	Calico	SD-RD-8	34°57'00"	116°51'50"	10N	1E	22	2340	2	2.00	Co. Reg. Parks
305	Spadra, Pacific Colony	SU-8	34°02'32"	117°48'34"	1S	9W	34G	690	30	14.20	S.B.C.F.C.D.

RAINFALL STATION INDEX

STATION NO.	STATION NAME	TYPE	N. LAT.	W. LONG.	T. R. S.	ELEV. FEET	RECORD YEARS	AVER. YEARLY	OBSERVER
309	Cucamonga Canyon	RD-8 (T)	34°10'48"	117°37'36"	1N 7W 8R	2640	-	-	S.B.C.F.C.D.
310	Upland Lemon Ass'n.	SP-8	34°05'47"	117°38'30"	1S 7W 8R	1220	24	16.37	Sam Woodward
317	San Antonio Dam	RD-8	34°10'00"	117°40'00"	1N 8W 24	2125	7	17.97	U.S. C of E
321	Goldstone Echo	SP-8	35°18'03"	116°48'17"	14N 2E 19A	3220	9	5.36	Gaudian
329	Redlands - Bottenberg	SP-8	34°02'30"	117°10'54"	1S 3W 34G	1465	2	13.08	Bottenberg, Mathew
330	Big Bear - Ryan	SP-8	34°15'36"	116°51'00"	2N 1E 10K	7000	2	16.45	Earl Ryan

STANDARD GAGES

SP-8 Private 8"
 SP-5 Private 5"
 SP-3 Private 3"
 SD-8 F.C.D. 8"
 SD-5 F.C.D. 5"
 ID-5 F.C.D. Indoor 5"
 SD-4 F.C.D. 4"

STANDARD GAGES

SU-8 Other Governmental 8"
 SU-5 Other Governmental 5"
 SU Other Governmental

AUTOMATIC RECORDING GAGES

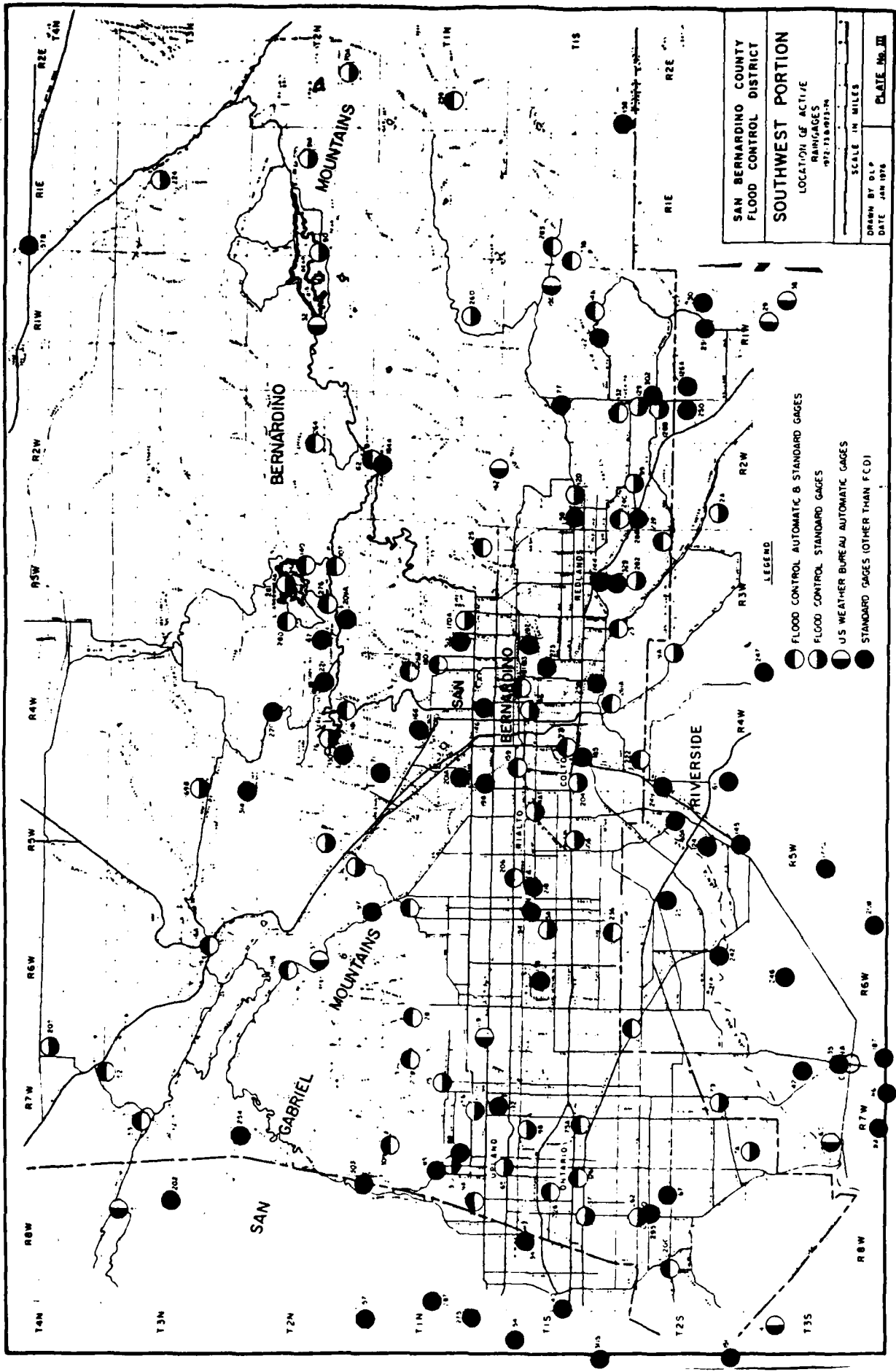
RD F.C.D. 8"
 RU Other Governmental 8"

RAINFALL STATION INDEX

ABBREVIATIONS

Amer. Pot. & Chem.
 Big Bear Lake C.F.D.
 C.D.A.
 C.D.B.P.
 C.D.F.
 C.D.H.
 C.R.F.P.D.
 Crest Forest C.W.D.
 F.A.A.
 L.A.C. Fire Warden
 Mentone B.G.O. Co.
 M.F.P.D.
 M.V.C.S.
 M.W.D.
 N.O.A.A.
 R.C.F.C. & W.C.D.
 S.B.C.W.D.
 S.B.C.F.C.D.
 S.B.V.M.W.D.
 S.C.E. Co.
 So. Cal. Gas Co.
 U.C.R.
 U.S.A.F.W. Norton
 U.S.C. of E.
 U.S. Dept. of Ag.
 U.S.F.S.

American Potash and Chemical
 Big Bear Lake County Fire District
 California Division of Agriculture
 California Division of Beaches and Parks
 California Division of Forestry
 California Division of Highways
 Chino Rural Fire Protection District
 Crest Forest County Water District
 Federal Aviation Administration
 Los Angeles County Fire Warden
 Mentone Blue Goose Orange Company
 Muscoy Fire Protection District
 Morongo Valley Community Services
 Metropolitan Water District
 National Oceanic and Atmospheric Administration
 Riverside County Flood Control and Water
 Conservation District
 San Bernardino City Water District
 San Bernardino County Flood Control District
 San Bernardino Valley Municipal Water District
 Southern California Edison Company
 Southern California Gas Company
 University of California at Riverside
 United States Air Force Weather Norton
 United States Corps of Engineers
 United States Department of Agriculture
 United States Forest Service



SAN BERNARDINO COUNTY
FLOOD CONTROL DISTRICT

SOUTHWEST PORTION

LOCATION OF ACTIVE
RANGAGES
1972-73 & 1973-74

SCALE IN MILES
0 1 2 3 4 5

DRAWN BY DLP
DATE JAN 1976

PLATE No. III

- LEGEND
- FLOOD CONTROL AUTOMATIC & STANDARD GAGES
 - FLOOD CONTROL STANDARD GAGES
 - U.S. WEATHER BUREAU AUTOMATIC GAGES
 - STANDARD GAGES (OTHER THAN FCD)

SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT
COMPARATIVE MAXIMUM RAINFALL AMOUNTS IN INCHES
MAXIMUM PRECIPITATION FOR INDICATED DATED

SEASON 1972-73

Station		15 Min.	30 Min.	1 Hr.	2 Hr.	6 Hr.	12 Hr.	24 Hr.
Arrowhead Ranger Station #107	Amt. Date	.23 10-18-72	.36 3-11-73	.60 2-11-73	1.10 2-11-73	2.35 1-18-73	3.65 2-11-73	5.85 2-11-73
Arrowhead Springs Hotel #268	Amt. Date	.35 10-19-72	.45 10-19-72	.50 10-19-72	.87 1-18-73	1.59 1-18-73	1.75 1-18-73	2.40 2-11-73
Barstow Fire Department #112	Amt. Date	.12 11-11-72	.12 11-11-72	.17 11-11-72	.22 12-04-72	.29 12-04-72	.29 12-04-72	.29 12-04-72
Big Bear Lake Dam #32	Amt. Date	.20 11-11-72	.40 11-11-72	.60 11-11-72	.80 11-11-72	1.10 11-11-72	2.00 11-16-72	2.70 11-16-72
Cajon Junction #16	Amt. Date	.25 2-28-73	.40 2-28-73	.60 2-11-73	1.00 2-11-73	2.72 2-10-73	3.97 2-10-73	4.82 2-10-73
Cajon West Summit #52	Amt. Date	.10 2-11-73	.10 2-11-73	.20 2-11-73	.40 2-11-73	1.10 2-11-73	1.80 2-11-73	2.20 2-11-73
Calico #304	Amt. Date	.10 2-11-73	.12 2-11-73	.20 3-13-73	.22 3-13-73	.37 2-11-73	.53 3-08-73	.58 3-08-73
Camp Angelus #53	Amt. Date	.30 8-01-73	.50 8-01-73	.80 8-01-73	1.20 8-01-73	1.70 2-04-72	2.30 2-11-73	4.00 2-11-73
Chino Fire Department #2 #20C	Amt. Date	.37 10-19-72	.52 2-06-73	.55 2-06-73	.77 11-14-72	1.00 11-14-72	1.70 1-16-73	1.87 2-10-73

MONTHLY AND SEASONAL PRECIPITATION IN INCHES

STA. NO. & NAME	SEASON	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	SEASON TOTAL
Adelanto	72-73	.36	.72	.27	.72	1.65	1.00	0	T	0	.08	.50	0	5.30
89-A	73-74	.05	.17	.06	3.20	.02	.26	.01	.30	0	.20	.87	0	5.14
Alta Loma	72-73	.33	3.31	2.51	4.06	10.82	5.16	.26	.14	0	0	0	0	26.59
175	73-74	.06	1.87	.47	9.23	0	3.94	.63	.12	0	0	0	0	16.32
Alta Loma	72-73	.51	3.15	2.43	3.94	8.25	5.35	.03	.20	0	0	0	0	23.85
256	73-74	.02	1.77	.27	8.96	.17	4.26	.77	.15	0	0	0	0	15.77
Amboy	72-73	.30*	.56	0	.24	0*	0*	0	0	0	0	.20	0	1.30*
150	73-74	0	0*	0	0*	.27	0	0	0	0	0*	0*	0*	.27*
Amboy - Saltus 1	72-73	.41	.54	.01	.14	.48	.73	.05	0	0	0	.02	0	2.38
298	73-74	0	.20	0	.97	0	.33	0	0	0	.15	0	0	1.65
Amboy - Saltus 2	72-73	.43	.45	.02	.13	.42	.49	.03	0	0	0	.05	0	2.02
300	73-74	0	.29	0	1.04	0	.35	0	0	0	.28	0	0	1.96
Apple Valley	72-73	.53	.71	.21	.69	1.77	1.77	.06	0	0	0	0	0	5.74
136	73-74	0	.61	0	1.55	0	.26	.07	.21	0	.79	.24	0	3.73
Arlington	72-73	.25	2.25	1.07	1.53	2.84	2.22	0	0	.06	0	0	0	10.22
177-A	73-74	.03	1.21	.15	3.95	0	1.93	.27	0	0	0	0	0	7.54
Arrowhead Rngr	72-73	1.91	5.60	4.60	8.10	14.52	11.40	.50	.95	.03	0	T	0	47.61
107	73-74	.20	4.50	1.45	20.04	0	3.14	2.36	.47	0	T	0	0	32.16

*Estimated Data

SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT

HISTORICAL

MAXIMUM RECORDED PRECIPITATION FOR DATES AND INTERVALS INDICATED (INCHES)

Station	15 Min.	30 Min.	1 Hr.	2 Hr.	6 Hr.	12 Hr.	24 Hr.
Arrowhead Ranger Station #107	Amt. Date .40 11-22-65	.65 11-22-65	1.30 11-22-65	2.25 11-22-65	4.95 11-22-65	8.65 1-25-69	13.35 1-25-69
Arrowhead Springs Hotel #268	Amt. Date .32 10-19-62	.40 10-19-62	.55 11-18-73	.90 1-18-73	1.62 1-18-73	2.00 1-04-74	2.52 1-05-74
Barstow Fire District #112A	Amt. Date .51 7-20-69	.65 7-20-69	.80 7-20-69	.81 7-20-69	.81 7-20-69	.81 7-20-69	.81 7-20-69
Big Bear Lake Dam #32	Amt. Date .20 11-18-73	.40 11-11-72	.60 11-11-72	.80 11-11-72	1.60 11-18-73	2.20 11-18-73	2.90 11-18-73
Cajon Junction #16A	Amt. Date .58 1-21-69	.87 1-21-69	1.62 1-21-69	2.62 1-21-69	4.81 1-21-69	7.32 12-29-65	7.52 12-29-65
Chino Fire Station #2 #20C	Amt. Date .60 11-20-67	.85 3-08-68	1.20 3-08-68	1.70 3-08-68	3.27 3-08-68	4.30 1-26-56	6.21 1-26-56
Colton Fire Dept. #27A	Amt. Date .48 9-18-63	.80 9-18-63	1.02 9-18-63	1.26 9-19-63	2.22 1-25-69	3.24 1-25-69	4.72 1-26-56
Crafton #24C	Amt. Date .67 8-23-67	.77 8-23-67	.83 8-23-67	.98 3-08-68	1.95 2-09-63	3.16 1-25-69	4.53 1-25-69
Crestline Fire Dept. #2 #284	Amt. Date .40 10-19-72	.60 10-19-72	1.00 10-19-72	1.20 8-01-73	2.80 11-18-73	4.20 2-11-73	6.40 2-11-73

7. Index of precipitation gages, Orange County, with location map. Courtesy of Emmett Franklin, Orange County Environmental Management Agency, (OCEMA).

TABLE I
NUMERICAL LIST OF STATIONS IN THE
OCEMA PRECIPITATION NETWORK
1982-83

NO	STATION	COUNTY	LATITUDE	LONGITUDE	ELEVATION (FT)	RECORD PERIOD	TYPE GAGE	COOPERATOR
1	Seal Beach	Orange	33-44-38	118-06-43	12	*	8 in. Standard	City
3	Artesia Fire Station	Los Angeles	33-51-42	118-04-58	51	1917	8 in. non- Recording	LAFCD
4	La Mirada	Los Angeles	33-53-13	118-00-56	86	1925	8 in. non- Recording	LAFCD
5	Buena Park	Orange	33-51-28	117-59-29	80	1926	3 in. non- Recording	City
18	Diamond Bar Horse Camp	Los Angeles	33-59-40	117-48-54	880	1930	8 in. non- Recording	MWS
23	Prado Dam	Riverside	33-53-24	118-38-09	480	*	8 in. Standard	OCEMA
26	Yorba Linda	Orange	33-53-16	117-49-10	345	1912	8 in. Standard	Observer
27	Piacentia Mutual Orange Assoc.	Orange	33-52-04	117-52-24	220	*	5 in. non- Recording	Observer
28	Fullerton Knowlton	Orange	33-52-20	117-53-45	200	1919	8 in. non- Recording	Observer
29	Anaheim Union Water Works	Orange	33-51-32	117-53-06	190	*	8 in. Standard	Observer
33	Anaheim Water Works	Orange	33-49-49	117-54-38	155	1921	8 in. non- Recording	City
36	Anaheim-Katella Substation	Orange	33-48-11	117-54-05	140	*	8 in. English	City
43	Wintersburg-Slater	Orange	33-42-47	117-59-54	25	*	1 1/8 in. Opening	Observer
45	Huntington Beach Fire Department	Orange	33-39-30	117-59-48	40	1927	8 in. non- Recording	City
46	Costa Mesa Park	Orange	33-38-26	117-55-16	95	*	8 in. non- Recording	City
47	Costa Mesa - Shiffer	Orange	33-40-56	117-53-47	47	*	3 in. gage	Observer
50	El Toro-Moulton Ranch	Orange	33-36-26	117-42-08	400	*	6 in. gage	Observer
51	Irvine - Shaddy Camp	Orange	33-37-39	117-49-16	270	*	6 in. gage	Irvine Co.
52	Irvine - Bommer (old cattle)	Orange	33-39-48	117-49-54	80	*	6 in. gage	Irvine Co.
54	Irvine - Markle Road	Orange	33-41	117-48	100	*	6 in. non- Recording	Irvine Co.
55	Irvine - Community	Orange	33-40	117-45	200	*	6 in. non- Recording	Irvine Co.
56	Irvine - Baudino	Orange	33-38-56	117-42-35	355	*	8 in. non- Recording	Irvine Co.
57	Irvine - Lambert	Orange	33-42	117-43	435	*	6 in. non- Recording	Irvine Co.
60	Irvine - San Joaquin	Orange	33-42-08	117-46-06	200	*	6 in. gage	Irvine Co.
61	Tustin - Irvine Ranch	Orange	33-43-46	117-46-58	118	1897	8 in. non- Recording	Irvine Co.
63	Dulhi - Holly Sugar	Orange	33-42-33	117-51-15	65	1923	3 in. non- Recording	Observer
74	Irvine - Limestone	Orange	33-45-27	117-42-03	855	1918	6 in. non- Recording	Irvine Co.
77	Silverado - Molts	Orange	33-44-07	117-38-04	1275	*	Non- Recording	Observer
81	Trabuco Canyon - Robinson	Orange	33-39-12	117-34-14	1200	*	6 in. Standard	Observer
86	San Juan Capistrano - Mankey	Orange	33-30-45	117-38-16	150	*	8 in. non- Recording	Observer
88	Newport Beach Harbor Master	Orange	33-36-16	117-53-00	8	1921	8 in. non- Recording	Harbor Dist.
90	Brea - Union Oil	Orange	33-55-49	117-54-53	370	*	3 in. List	Observer
91	Anaheim Carroll Ranch	Orange	33-49-54	117-57-49	105	*	8 in. non- Recording	Observer
92	San Juan Substation	Orange	33-30-44	117-39-56	160	*	8 in. non- Recording	SDG & E
93	Fullerton Pumping Plant	Orange	33-50-52	117-55-34	150	1931	3 in. non- Recording	City
96	Fullerton Millcrest Reservoir	Orange	33-53-00	117-55-12	330	1931	3 in. non- Recording	City
98	Puente Mill - Weisel	Los Angeles	33-57-05	117-55-28	630	1925	8 in. non- Recording	LAFCD

(Continued)

* Historical record for 20 or more years is available. Station has been discontinued; period of record is shown in alphabetical listing on page

TABLE 1 (cont'd)

NUMERICAL LIST OF STATIONS IN THE
OCMA PRECIPITATION NETWORK
1982-83

(Continued)

NO.	STATION	COUNTY	LATITUDE	LONGITUDE	ELEVATION (FT.)	RECORD BEGINS	TYPE GAGE	COOPERATOR
99	Laguna Beach Hardware	Orange	33-23-33	117-46-55	30	*	8 in. non-Recording	Observer
100	Laguna Beach - Treatment Plant	Orange	33-32-49	117-46-53	50	1928	8 in. non-Recording	City
109	Villa Park Orchard Association	Orange	33-48-53	117-49-20	300	1928	3 in. non-Recording	Observer
116	Garden Grove - County Yard	Orange	33-46-02	117-56-00	87	*	8 in. Standard	City
118	Santiago Dam	Orange	33-47-13	117-43-16	855	1938	8 in. Recording	NWS
119	Silverado Ranger Station	Orange	33-44-34	117-39-29	1095	1938	8 in. Recording	NWS
121	Santa Ana - OCMA	Orange	33-45-94	117-52-11	180	1932	18 in. Recording	OCMA
125	Irvine	Orange	33-40-38	117-45-33	200	1936	18 in. Recording	OCMA
126	Fullerton Airport	Orange	33-52-23	117-58-24	100	1935	18 in. Recording	OCMA
130	El Toro Los Alisos Ranch	Orange	33-39-50	117-40-05	680	*	6 in. non-Recording	Observer
131	San Clemente Fire Station	Orange	32-25-38	117-36-31	260	*	3 in. non-Recording	City
132	El Modena	Orange	33-48-28	117-46-36	464	1938	8 in. Recording	NWS
133	Trabuco Canyon	Orange	33-39-26	117-35-32	970	1939	8 in. Recording	NWS
134	San Juan Guard Station	Orange	33-35-30	117-30-47	730	1939	8 in. non-Recording	OCMA
135	Huntington Beach	Orange	33-40-48	118-00-00	75	*	8 in. non-Recording	OCMA
136	Olive Heights	Orange	33-50-17	117-50-43	225	1939	6 in. non-Recording	Observer
141	Laguna Beach No. 2	Orange	33-33-03	117-48-01	210	1942	18 in. Digital	NWS
142	Lemon Heights	Orange	33-45-26	117-46-51	380	*	6 in. non-Recording	Observer
143	Irvine - Salt Works	Orange	33-38-50	117-52-03	0	*	6 in. Gage	Observer
144	Brea - Orange County Reservoir	Orange	33-56-10	117-52-38	660	1943	8 in. Recording	NWS
145	Prado Dam	River-Side	33-53-25	117-38-10	560	1942	8 in. Recording	NWS
146	Lambert Reservoir	Orange	33-41-41	117-42-39	470	1945	18 in. Recording	OCMA
148	Orange - U.S. Forest Service	Orange	33-47-17	117-50-26	215	*	8 in. non-Recording	USFS
151	Aliso Canyon - Cook	Orange	33-40-59	117-37-12	1080	*	8 in. non-Recording	Observer
152	La Habra Fire Dept.	Orange	33-55-53	117-57-13	285	1926	3 in. non-Recording	City
153	Fullerton Dam	Orange	33-53-50	117-53-97	340	1944	8 in. Recording	NWS
154	Brea Dam	Orange	33-52-25	117-55-30	275	1944	8 in. Recording	NWS
156	Santiago Peak	Orange	33-42-39	117-31-59	5660	1949	8 in. Digital	NWS
158	Los Alamitos	Orange	33-48-35	118-04-35	25	1950	8 in. non-Recording	Observer
161	Santa Ana - Scudder	Orange	33-45-07	117-53-22	96	*	8 in. non-Recording	Observer
162	Westminster	Orange	33-45-08	117-59-17	38	1955	8 in. Recording	OCMA
163	Verde Reservoir	Orange	33-52-19	117-48-37	300	1955	8 in. Recording	OCMA
164	Capistrano Beach	Orange	33-28-03	117-41-02	20	1955	8 in. Recording	OCMA
165	Costa Mesa	Orange	33-40-07	117-53-35	55	1955	8 in. Recording	OCMA
167	Anaheim - Agriculture Dept.	Orange	33-49-12	117-54-48	147	1957	8 in. Recording	OCMA
169	Corona Del Mar	Orange	33-36-35	117-51-27	300	1959	8 in. Recording	OCMA
170	Los Alamitos	Los Angeles	33-45-24	118-05-43	5	1958	8 in. Recording	OCMA

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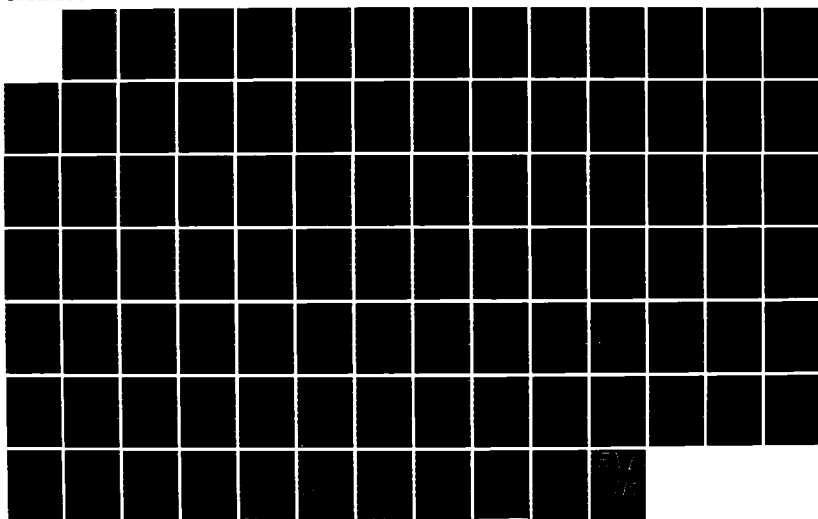
METEOROLOGICAL DATA INVENTORY SOUTHERN CALIFORNIA
COASTAL ZONE RAGGED POI. (U) DMA CONSULTING ENGINEERS
MARINA DEL REY CA DEC 85 COE/SPLPD/C-CCSTMS-85-7
DACH09-85-D-0010

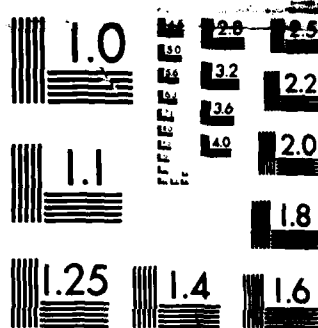
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UNCLASSIFIED

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MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS - 1963-A

TABLE 1 (cont'd)

NUMERICAL LIST OF STATIONS IN THE
OCEMA PRECIPITATION NETWORK
1982-83

(Continued)

NO	STATION	COUNTY	LATITUDE	LONGITUDE	ELEVATION (FT)	RECORD BEGIN	TYPE GAGE	OPERATOR
171	El Modena - Hower	Orange	33-47-11	117-48-03	310	1959	6 in. non-Recording	Observer
173	Villa Park Dam	Orange	33-48-51	117-46-00	572	1961	8 in. non-Recording	OCEMA
174	Atwood - OCHD	Orange	33-51-12	117-49-35	245	1963	8 in. non-Recording	OCHD
176	El Toro	Orange	33-37-35	117-41-26	455	1964	8 in. non-Recording	OCEMA
178	El Toro - Industrial Farm	Orange	33-39-52	117-41-43	320	1965	8 in. non-Recording	Observer
181	Modjeska Canyon-McArthur	Orange	33-42-26	117-37-39	1300	1963	1 in. non-Recording	Observer
183	Brea City	Orange	33-54-53	117-54-04	345	"	8 in. non-Recording	City
184	Garden Grove City Hall	Orange	34-46-35	117-55-59	120	1964	8 in. non-Recording	City
185	Carbon Canyon - Gilman	Orange	35-55-24	117-46-31	1625	1954	8 in. non-Recording	WWS
186	San Clemente - Palisades Reservoir	Orange	33-27-46	117-39-02	360	1963	8 in. non-Recording	Observer
188	Carbon Canyon - Workman	San Bernardino	33-57-30	117-46-42	1180	1949	8 in. non-Recording	WWS
190	La Habra Mts. Mutual Water Company	Los Angeles	34-56-55	117-57-50	450	1964	8 in. non-Recording	Observer
191	Santa Ana Fire Station	Orange	33-44-39	117-52-02	115	1907	Non-Recording	City
192	El Cariso Guard Station	Riverside	33-39-00	117-24-43	2660	1963	8 in. non-Recording	USFS
196	Irvine Country Club	Orange	33-36-43	117-52-56	105	"	8 in. non-Recording	Irvine Co.
197	Bryant Ranch	Orange	33-52-32	117-42-28	425	1963	8 in. non-Recording	Observer
198	Oak Flat	Orange	33-49-15	117-38-18	2700	1969	8 in. non-Recording	OCEMA
201	Mission Viejo Cow Camp	Orange	33-31-21	117-35-31	300	1969	2 in. non-Recording	Observer
203	Moulton Miguel Water District	Orange	33-34-41	117-40-23	300	1969	8 in. non-Recording	Observer
204	Green River Golf Course	San Bernardino	33-52-25	117-40-15	450	1969	8 in. non-Recording	Observer
205	Anaheim Walnut Canyon Res.	Orange	33-49-19	117-45-03	800	1969	8 in. non-Recording	City
206	Trabuco Forestry	Orange	33-39-15	117-35-34	800	1971	8 in. non-Recording	USFS
207	Coto De Casa	Orange	33-35-14	117-35-05	974	1971	8 in. non-Recording	Observer
208	Stanton Yard - OCEMA	Orange	33-47-07	118-00-32	600	1974	8 in. non-Recording	Observer
209	Anaheim - OCEMA Yard	Orange	33-48-11	117-52-34	51	1964	8 in. non-Recording	OCEMA
210	Silverado Canyon - Grouard	Orange	33-44-48	117-36-55	1400	1971	4 in. non-Recording	Observer
211	Laguna Miguel Fire Station	Orange	33-31-29	117-42-58	150	1973	8 in. non-Recording	Observer
212	Anaheim - Lewis Substation	Orange	33-48-37	117-53-51	350	1973	4 in. non-Recording	Observer
214	Modjeska Canyon - Tucker	Orange	33-42-35	117-37-08	1400	1974	8 in. non-Recording	OCEMA
216	Sulphur Creek Dam	Orange	33-32-59	117-42-20	190	1974	8 in. non-Recording	OCEMA
217	Huntington Beach - James	Orange	33-43-33	118-02-37	9	1974	8 in. non-Recording	Observer
221	San Juan Capistrano - Lacougue	Orange	33-30-33	117-37-55	140	1979	8 in. non-Recording	OCEMA
222	Orange - Mardacre	Orange	33-48-53	117-49-20	300	1980	4 in. non-Recording	Observer

TABLE 2
ALPHABETICAL LIST OF STATIONS IN THE
OCEMA PRECIPITATION NETWORK

STATION	NO.	PERIOD OF RECORD		STATION	NO.	PERIOD OF RECORD	
		1945	1975			1928	1978
Aliso Canyon - Cook	151	1945	1975	Logans Beach Hardware	99	1928	1978
Anaheim - Agriculture Department	167	1957	•	Logans Beach No. 2	141	1943	•
Anaheim - Carroll Ranch	91	1924	1977	Logans Beach Treatment Plant	100	1929	•
Anaheim - Lewis Substation	212	1974	•	Logans Miguel Fire Station	211	1974	•
Anaheim - Estrella Substation	36	1923	1973	La Habra Fire Department	132	1927	•
Anaheim - OCEMA Yard	209	1975	•	La Habra Heights Mutual Water Co.	190	1961	•
Anaheim - Union Water Company	29	1930	1969	Lambert Reservoir	146	1947	•
Anaheim - Motor Works	33	1880	•	La Mirada	4	1926	•
Artesia - Fire Station	3	1918	•	Laurel Heights	142	1944	1980
Arwood - OGB	174	1944	•	Los Alamitos	158	1951	•
Brea - City	183	1965	1980	Los Alamitos	170	1959	•
Brea Dam *	154	1947	•	Mission Viejo - Cow Camp	201	1970	•
Brea Orange County Reservoir	144	1944	1977	Modjeska Canyon - Marcher	181	1964	•
Brea Union Oil	90	1923	1946	Modjeska Canyon - Tusher	214	1975	•
Bryant Ranch	197	1945	•	Newton Miguel Water District	203	1970	•
Buena Park	5	1927	•	Newport Beach Harbor Master	80	1922	•
Capistrano Beach	164	1954	•	Oak Flat	190	1970	•
Carbon Canyon - Gilman *	185	1946	•	Olive Heights	136	1940	•
Carbon Canyon - Workman *	188	1947	•	Orange - U. S. Forest Service	148	1942	1980
Corona Del Mar	169	1940	•	Orange - Hardacre	222	1980	•
Costa Mesa	165	1954	•	Pico Canyon Mutual Orange Association	27	1928	1980
Costa Mesa Park	46	1928	1976	Prado Dam	23	1931	1969
Costa Mesa - Shiffer	47	1928	1971	Prado Dam	145	1943	•
Coto De Casa	207	1971	•	Punta Hills - Weibel	98	1926	•
Dalhi - Holly Sugar	63	1924	1982	San Clemente Fire Station	131	1931	1977
Diamond Bar Horse Camp	18	1931	•	San Clemente - Palmdale Reservoir	186	1944	•
El Cerrito Guard Station	192	1946	•	San Juan Capistrano - Ranney	86	1905	1977
El Modena	132	1938	•	San Juan Capistrano - Lacombe	221	1979	•
El Modena - Bower	171	1940	•	San Juan Guard Station	134	1947	•
El Toro	176	1943	•	San Juan Substation	92	1923	1976
El Toro Los Alisos Ranch	130	1929	1977	Santa Ana Fire Station	191	1944	•
El Toro Industrial Park	178	1946	•	Santa Ana - OCEMA	121	1909	•
El Toro - Newton Ranch	50	1877	1972	Santa Ana - Scudder	141	1954	1978
Fullerton Airport	126	1923	•	Santiago Dam	118	1938	•
Fullerton Dam *	153	1947	•	Santiago Peak	136	1950	•
Fullerton Knolls	28	1919	•	Seal Beach	1	1928	1948
Fullerton Hillcrest Reservoir	96	1931	•	Silverado Canyon - Ground	210	1976	•
Fullerton Pumping Plant	93	1932	•	Silverado - Holts	77	1919	1964
Garden Grove City Hall	184	1965	•	Silverado Ranger Station	119	1938	•
Garden Grove County Yard	116	1938	1970	Stanton Yard	208	1975	•
Gross River Golf Course	204	1970	•	Sulphur Creek Dam	216	1975	•
Huntington Beach	135	1933	1977	Trebozo Canyon	133	1940	•
Huntington Beach Fire Department	45	1928	•	Trebozo Canyon - Robinson	81	1926	1947
Huntington Beach - Jones	217	1975	•	Trebozo Forestry	206	1970	•
Irvine	125	1937	•	Tustin - Irvine Ranch	61	1898	•
Irvine - Hammer (Old Castle)	52	1898	1977	Villa Park Dam	173	1942	•
Irvine - Hamilton	56	1911	•	Villa Park Orchard Association	109	1929	1980
Irvine - Community	55	1894	1972	Westminster	162	1954	•
Irvine - Country Club	196	1949	1974	Wintersburg - Slater	43	1928	1971
Irvine - Barkle Road	54	1911	1970	Yorba Linda	26	1913	•
Irvine - Lambert	37	1927	1973	Yorba Reservoir	163	1954	•
Irvine - Limestone	74	1918	•				
Irvine - San Joaquin	60	1921	1974				
Irvine - Shady Camp	51	1903	1970				
Irvine - Salt Works	143	1944	1969				

* Station Currently Collecting Data

* Period of Record Interrupted during 1977-1982

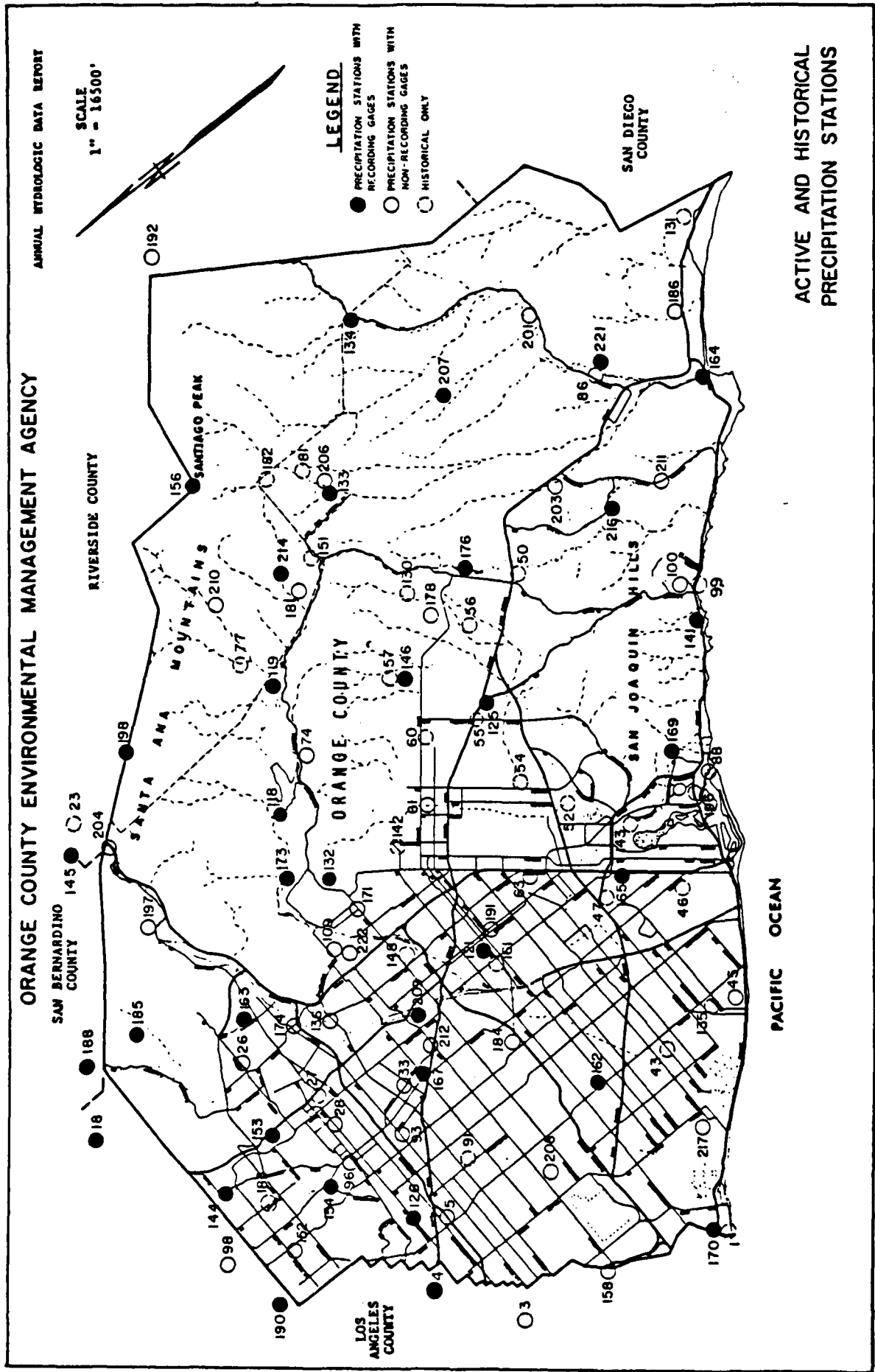
ORANGE COUNTY ENVIRONMENTAL MANAGEMENT AGENCY

ANNUAL HYDROLOGIC DATA REPORT

SCALE
1" = 16500'

LEGEND

- PRECIPITATION STATIONS WITH RECORDING GAGES
- PRECIPITATION STATIONS WITH NON-RECORDING GAGES
- HISTORICAL ONLY



ACTIVE AND HISTORICAL
PRECIPITATION STATIONS

8. Typical Data sheets, Orange County Environmental
Management Agency.

ORANGE COUNTY ENVIRONMENTAL MANAGEMENT AGENCY

DAILY PRECIPITATION 1982-83 SEASON

STATION SANTA ANA RAIN

OCEMA NO. 1210

OBSERVATION TIME 0800

OBSERVER OCEMA

DAY	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	DAY
1						0.31			0.16		0.32		1
2									4.37				2
3								0.34	1.73				3
4								0.32	0.08				4
5									0.01				5
6								0.11	0.19	T			6
7								0.16					7
8			0.23					0.29					8
9			0.03		0.09								9
10					1.42								10
11			0.03		0.11								11
12						0.02				T			12
13								0.06					13
14									0.27				14
15													15
16			0.10										16
17									0.62				17
18			0.08						0.54	0.69			18
19					0.18		0.06	0.01	0.59				19
20					0.02					0.39			20
21									0.79	0.30			21
22						0.05			0.01				22
23						0.97	1.15		0.40				23
24								0.15	0.94				24
25							0.29		0.06				25
26			0.41	0.07	0.02			0.36					26
27			0.02	0.06			1.17	0.87					27
28							0.53	0.76	0.04				28
29					0.04		0.71			1.05			29
30					1.52					0.13			30
31				0.07									31
TOT	0.00	0.00	0.90	0.20	3.40	1.35	3.91	3.49	10.80	2.56	0.32	0.00	TOT

— LEGEND —

A-ESTIMATED

C-INCOMPLETE

NR-NO RECORD

B-PARTIALLY ESTIMATED

D-DATE UNCERTAIN

T-TRACE

P-INCLUDED IN FOLLOWING TOTAL

REMARKS _____

40 YEAR BASE MEAN _____ SEASON AS % OF BASE MEAN _____

75 YEAR MEAN 13.03 SEASON AS % OF 75 YEAR MEAN 206.2%

DAYS OF RAIN 61

SEASON TOTAL 26.87

SEASONAL RAINFALL

By Months

July 1st to June 30th

Station No. 64 Name: HILL + SON - SANTA ANA

Lat. 33° 45' Long. 117° 52' Elev. 125'

SEASON	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Season Total
1908-09	—	—	0.80	0.22	0.25	0.46	5.40	5.34	4.29	0.08	—	—	15.44
09-10	—	—	—	0.11	1.39	6.75	2.97	0.14	1.97	0.29	—	—	13.62
1910-11	0.05	—	0.02	0.53	0.42	0.25	4.47	3.60	2.31	0.68	—	—	12.31
11-12	—	—	0.49	0.74	—	0.69	0.26	—	4.00	1.53	0.14	—	7.85
12-13	—	—	—	0.76	0.45	—	1.27	4.88	0.40	0.18	0.17	0.33	8.44
13-14	—	—	—	—	1.65	1.23	6.60	3.00	0.99	0.91	0.15	0.14	14.67
14-15	—	—	—	1.38	1.82	4.80	5.03	4.66	0.57	0.86	0.88	—	20.00
15-16	—	—	—	—	0.97	2.82	11.18	1.64	1.27	0.03	0.22	—	18.13
16-17	—	—	0.57	1.52	0.12	3.71	2.41	2.91	0.22	0.34	0.10	—	11.87
17-18	—	—	—	—	0.38	—	1.46	3.06	4.82	0.11	0.41	—	10.24
18-19	—	0.09	0.64	0.08	2.53	0.58	0.61	1.32	1.66	0.51	0.29	—	8.31
19-20	—	—	1.27	0.76	0.26	2.11	0.68	3.91	4.01	0.72	0.79	—	14.51
1920-21	—	—	0.08	1.57	0.46	1.02	2.83	0.79	2.35	0.05	3.01	—	12.16
21-22	—	—	—	1.14	—	7.65	3.38	2.78	1.55	0.10	0.54	—	17.14
22-23	—	—	—	0.07	0.94	2.61	1.30	1.58	0.27	1.01	—	—	7.58
23-24	—	—	0.11	0.28	1.71	2.52	0.78	—	4.16	2.48	—	—	12.04
24-25	—	—	—	0.24	0.66	1.30	0.23	0.56	1.23	1.32	0.05	0.33	5.92
25-26	—	—	—	1.86	0.31	1.39	0.40	3.28	0.23	5.82	0.05	0.03	13.35
26-27	—	—	—	0.35	2.07	1.39	1.31	7.28	3.12	0.94	0.05	—	16.81
27-28	—	0.15	0.04	1.20	3.44	3.46	0.24	2.65	2.27	0.02	0.36	0.01	13.84
28-29	—	—	—	0.47	1.55	2.32	1.45	1.16	1.60	1.10	0.01	0.08	9.74
29-30	—	—	0.42	0.05	—	0.02	5.50	0.53	2.89	0.16	2.28	—	11.85
1930-31	—	—	—	0.20	1.81	—	3.33	2.20	—	3.15	0.67	0.06	11.42
31-32	—	0.05	0.21	0.41	2.53	4.90	1.18	5.60	0.02	0.52	—	—	15.40
32-33	—	—	0.14	0.48	—	2.31	5.69	0.02	0.09	0.41	0.56	0.10	9.80
33-34	—	0.23	—	0.37	—	4.47	2.24	1.52	0.06	—	—	0.43	9.32
34-35	—	0.03	0.02	3.08	2.37	2.65	2.82	1.98	3.83	0.98	—	—	17.76
35-36	—	0.05	—	0.11	0.94	0.32	0.09	5.84	1.19	0.23	—	0.01	8.78
36-37	—	0.16	—	0.72	0.13	6.50	2.11	9.85	3.27	0.18	—	—	22.92
37-38	—	—	—	—	—	1.83	1.47	5.69	6.44	1.26	0.59	—	17.28
38-39	—	—	—	0.14	0.10	7.71	1.23	2.11	1.06	0.51	0.03	—	12.89
39-40	—	—	2.87	0.55	0.14	0.32	3.81	4.25	1.11	2.16	—	—	15.21
1940-41	—	—	—	1.22	1.26	5.51	2.13	8.04	9.51	3.03	0.41	—	31.14

OCRO
Record
Stations

(a) Subdivided on basis of #121

July 1st to June 30th

Lat.

Long.

Elev.

[illegible]

SEASONAL RAINFALL

By Months

July 1st to June 30th

Station No. 1210 Name: SANTA ANA ENG. BLDG.

Lat. 33°45'04"

Long. 117°52'11"

Elev. 180

SEASON	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Season Total
1932-33	NR	NR	NR	NR	NR	NR	5.42	0.02	0.07	0.38	0.53	0.09	NR
33-34	0.00	0.29	0.00	0.39	0.00	1.92	4.49	1.49	0.08	0.00	0.00	0.44	9.10
34-35	0.00	0.02	0.08	2.83	2.38	2.62	3.22	1.92	3.64	0.98	0.00	0.00	17.69
35-36	0.02	0.05	0.00	0.07	1.19	0.42	0.08	5.58	1.22	0.23	0.00	0.03	8.89
36-37	0.01	0.15	0.00	0.82	0.11	6.35	7.15	9.70	3.19	0.25	0.13	0.07	22.93
37-38	0.00	0.00	0.00	0.00	0.02	1.86	1.56	6.01	6.28	1.23	0.62	0.00	17.58
38-39	0.00	0.00	0.00	0.09	0.09	8.65	2.44	2.26	1.16	0.56	0.04	0.00	15.29
39-40	0.00	0.00	3.22	0.44	0.14	0.40	3.87	4.58	1.21	2.30	0.00	0.00	16.16
40-41	0.00	0.00	0.00	1.25	1.09	5.57	2.30	8.36	2.88	3.24	0.45	0.00	32.14
41-42	0.00	0.00	0.00	1.79	0.32	4.50	0.68	0.90	1.55	2.72	0.09	0.00	12.55
42-43	0.00	0.00	0.00	0.60	0.20	1.00	2.53	2.89	2.69	0.57	0.08	0.00	15.56
43-44	0.00	0.00	0.01	0.13	0.12	7.11	0.65	5.86	1.54	1.20	0.02	0.04	16.68
44-45	0.00	0.00	0.04	0.00	5.04	0.71	0.00	4.40	4.71	0.05	0.00	0.01	14.96
45-46	0.00	0.28	0.00	0.15	0.23	4.79	0.22	0.57	2.82	0.42	0.01	0.00	9.49
46-47	0.00	0.00	0.00	0.89	6.29	2.76	0.26	0.35	0.79	0.11	0.35	0.02	11.82
47-48	0.00	0.05	0.07	0.08	0.79	1.41	0.01	1.22	1.82	1.83	0.06	0.18	7.32
48-49	0.00	0.00	0.00	0.07	0.00	2.86	2.24	1.45	0.96	0.04	0.52	0.00	8.14
49-50	0.00	0.00	0.00	0.00	1.19	2.14	2.30	1.88	0.89	0.63	0.09	0.00	9.12
50-51	0.01	0.00	0.03	0.00	2.67	0.05	1.89	0.88	0.66	1.36	0.00	0.00	7.55
51-52	0.00	0.17	0.43	0.54	0.46	4.89	0.80	0.15	6.35	1.18	0.00	0.00	22.97
52-53	0.00	0.00	0.28	0.00	3.14	2.91	0.87	0.41	0.78	1.21	0.03	0.03	9.66
53-54	0.00	0.00	0.00	0.00	1.01	0.14	4.21	2.79	2.96	0.09	0.00	0.03	11.23
54-55	0.00	0.00	0.00	0.00	1.49	1.14	3.66	1.21	0.15	0.93	2.10	0.06	10.74
55-56	0.00	0.00	0.00	0.01	0.78	0.44	8.32	0.39	0.00	2.44	0.47	0.00	13.05
56-57	0.00	0.00	0.00	0.24	0.00	0.13	4.00	0.67	1.02	1.41	0.72	0.23	8.42
57-58	0.01	0.00	0.00	1.60	0.39	2.96	1.67	5.78	4.22	5.04	0.00	0.01	21.68
58-59	0.00	0.38	0.06	0.04	0.03	0.05	1.90	3.42	0.00	0.46	0.00	0.00	6.34
59-60	0.00	0.00	0.00	0.00	0.07	1.66	2.98	3.11	0.49	1.88	0.01	0.00	10.20
60-61	0.00	0.00	0.00	0.04	1.91	0.18	0.67	0.00	0.68	0.02	0.00	0.06	3.56
61-62	0.00	0.01	0.00	0.00	0.77	1.60	2.74	6.70	1.33	0.00	0.36	0.01	13.52
62-63	0.00	0.00	0.00	0.09	0.03	0.03	0.00	2.89	1.63	1.13	0.00	0.08	5.88
63-64	0.00	0.02	1.88	0.57	4.20	0.00	1.30	0.02	1.39	0.49	0.01	0.33	10.21
64-65	0.00	0.00	0.07	0.11	1.08	1.38	0.63	0.23	1.12	3.78	0.00	0.01	10.41
65-66	0.05	0.00	0.17	0.00	6.71	3.54	0.76	1.32	0.20	0.00	0.03	0.00	12.78
66-67	0.00	0.00	0.01	0.04	2.38	5.50	2.98	0.00	1.66	2.92	0.01	0.01	15.41

9. Index of precipitation gages, South Coast Region. From the California Department of Water Resources, Bulletin 230-81

TABLE 8. PRECIPITATION STATIONS BY AREAL CODE (continued)

AREAL CODE	DWR STATION NUMBER	STATION NAME	LATITUDE DEG° MIN' SEC"	LONGITUDE DEG° MIN' SEC"	TOWNSHIP & RANGE	ELEVATION	RECORD		MAXIMUM PRECIPITATION		MINIMUM PRECIPITATION		MEAN ANNUAL	YEARS OF RECORD
							YEAR BEGN	YEAR END	ANNUAL	YEAR OCCUR	ANNUAL	YEAR OCCUR		
U-03.F4	6149-00	NEWBURY PARK 4 SW	34-09-00	118-38-00	01N/20W-5	238	1968	1976	462.3	1968	308.7	1976	375.4	3
	6149-01	NEWBURY PARK ACADEMY	34-11-46	118-38-05	01N/20W-5	247	1965	1967	367.9	1966				
	6149-31	NEWBURY PARK-MECKMAN	34-10-40	118-35-17	01N/20W-5	216	1940	1946	880.6	1941	298.0	1942	468.3	7
	5623-00	WOODPARK 3 SE	34-15-23	118-30-53	02N/19W-5	194	1965	1976	576.6	1969	162.3	1976	376.3	5
U-03.F5	5626-51	WOODPARK 1 SSE	34-16-42	118-32-36	02N/19W-5	158	1975	1976	321.9	1975	180.8	1976	251.4	2
	6941-00	PIRU 3 SSE-SIMI-TELE-RRNG	34-21-34	118-46-41	03N/18W-5	860	1971							
U-03.F6	8784-03	TAPO CANYON	34-22-34	118-42-41	03N/18W-5	965	1976	1977	322.1	1977	288.4	1976	305.3	2
U-03.F7	0495-00	BARD RESERVOIR	34-14-04	118-49-05	02N/19W-5	314	1966	1976	582.8	1969	175.4	1976	368.9	5
	4673-50	LAKE BARD	34-14-32	118-49-41	02N/19W-5	308	1976	1977	232.8	1977	175.4	1976	204.1	2
	4804-70	LAS LLAJAS CANYON	34-18-05	118-41-24	03N/17W-5	351	1975	1976	346.3	1975	254.3	1976	300.3	2
	7973-00	SANTA SUSANA 4 MNE-C.V.RM	34-19-40	118-41-34	03N/17W-5	463	1975	1976	363.7	1975	288.4	1976	326.1	2
	7973-02	SANTA SUSANA AIRPORT	34-18-15	118-42-29	02N/17W-5	293	1969		482.6	1969				
	8256-00	SIMI	34-16-00	118-47-00		235	1976		257.7	1976				
	8258-00	SIMI 3E-VC FIRE STA -RRNG	34-16-17	118-44-05	02N/18W-5	280	1965	1975	308.7	1975				
	8258-10	SIMI VALLEY-FORSON RANCH	34-15-44	118-39-32	02N/17W-5	328	1958	1962	869.6	1958	167.7	1961	433.3	5
	8258-30	SIMI HILLS-BURRO FLAT	34-13-43	118-42-32	02N/18W-5	333	1963	1977	720.4	1969	193.8	1972	402.9	15
	8261-00	SIMI SANITATION PLANT	34-17-00	118-49-60	02N/18W-5	201	1977	1978	774.8	1978	309.8	1977	542.3	2
	8700-00	SUSANA KNOLLS-VCFO FIRE S	34-15-40	118-40-10	02N/17W-5	331	1957	1977	829.9	1958	161.9	1961	396.3	17
	8784-01	TAPO CITRUS ASSIN-SIMI VAL	34-17-12	118-43-09	02N/18W-5	308	1954	1966	653.0	1958	128.0	1961	329.0	11
	8784-06	TAPO WATER CD	34-17-53	118-43-16		329	1965	1966						
U-03.F8	1970-15	COMOJO RCH 2-THOUSAND OAK	34-11-48	118-51-36	01N/19W-5	244	1940	1957	858.9	1941	148.8	1948	361.7	18
	8905-09	THOUSAND OAKS FIRE STA	34-10-43	118-51-00	01N/19W-5	244	1957	1977	810.0	1969	141.0	1961	369.2	17
	8905-01	THOUSAND OAKS 2N-HILLSDAL	34-12-16	118-50-16	01N/19W-5	279	1976		229.4	1976				
	8907-00	THOUSAND OAKS	34-10-44	118-51-01	01N/19W-5	245	1977		304.6	1977				
U-04.A1	3345-11	GARRAPATA CANYON	34-07-44	118-34-42		431	1965	1969	1082.1	1969	439.2	1968	731.3	4
	3345-00	GARRAPATA CANYON-PEELER R	34-07-03	118-35-02	01N/16W-5	302	1931	1948	1320.0	1941	245.1	1948	607.1	18
	6416-11	OLD TOPANGA	34-06-29	118-37-41		308	1952	1978	1371.0	1978	200.0	1961	584.7	24
	7946-30	SANTA MARIA CREEK	34-07-44	118-34-42		431	1950	1978	1239.1	1978	186.1	1961	484.0	27
	8963-03	TOPANGA CYN OUTLET-DAVIS	34-02-58	118-34-66	01S/16W-5	23	1965	1969	593.7	1967	420.0	1966	483.3	3
	8963-15	TOPANGA - DE WITT	34-07-20	118-35-29	01N/16W-5	320	1952	1956	1076.3	1952	351.2	1953	566.3	5
	8967-00	TOPANGA PATROL STATION	34-05-03	118-35-57	01S/16W-5	227	1931	1980	1407.2	1978	227.6	1961	639.8	48
	8967-50	TOPANGA SUMMIT	34-08-23	118-36-00	01N/16W-5	463	1930	1944	1141.3	1941	334.5	1936	581.2	13
U-04.A5	4803-11	LAS FLORES CANYON	34-02-47	118-38-18		44	1965	1969	607.2	1969	349.3	1968	467.8	4
U-04.A6	1516-50	CARBON CANYON	34-02-18	118-38-56		15	1940	1979	925.1	1941	159.5	1961	406.9	39
U-04.B1	1901-00	COLD CREEK	34-03-27	118-39-22		402	1944	1968	1112.1	1952	228.4	1961	525.3	25
	5269-02	MALIBU BCH-DUNNE	34-02-00	118-42-42		49	1950	1978	736.4	1978	118.1	1961	366.4	28
	5269-03	MALIBU BCH WINTER CYN	34-02-02	118-41-30		5	1944	1948	500.0	1944	181.1	1948	322.6	4
	5269-15	MALIBU CRATER CAMP	34-04-47	118-41-57		143	1945	1953	1070.4	1952	263.0	1948	456.2	9
	5269-45	MALIBU LAKESIDE-READ	34-06-11	118-45-16	01S/18W-5	244	1930	1975	1289.4	1941	343.6	1964	648.8	21
	5790-11	MONTI WIDO	34-04-41	118-41-35	01S/17W-5	183	1939	1979	1238.6	1941	184.4	1961	537.9	40
	9589-01	WEST SADDLE PEAK-MALIBU	34-04-28	118-41-19	01S/17W-5	271	1930	1944	1235.3	1941	286.3	1940	636.2	14
	3943-70	HIDDEN HILLS	34-10-04	118-40-03		346	1977		363.1	1977				
	3663-06	GRIFFITH PK ZOO	34-08-02	118-17-18		183	1934	1966	1025.1	1941	134.3	1961	452.2	31
U-04.B2	8649-11	PALO COMADO CYN	34-09-40	118-44-08		305	1948	1974	767.0	1969	154.1	1961	380.3	22
U-04.B4	0043-50	AGOURA	34-08-08	118-45-68		244	1939	1979	1075.3	1941	155.7	1961	441.8	40
	5269-00	MALIBU-DIV WOODS	34-08-08	118-45-08	01N/18W-5	259	1965	1969	907.8	1969	419.3	1968	664.0	3
	8088-01	SEMINOLE HOT SPRGS-MALIBU	34-06-25	118-47-30	01S/18W-5	267	1930	1976	1209.3	1941	201.7	1961	550.3	42
	9027-21	TRIUNTO CANYON	34-07-50	118-47-52		251	1942	1964	895.6	1952	152.4	1961	405.8	22
J-04.B5	9562-50	WESTLAKE VILLAGE	34-08-19	118-49-65		270	1976	1977	313.9	1977	218.1	1976	266.0	2
U-04.B6	4706-11	LAKE SHERWOOD	34-09-00	118-53-59		317	1935	1977	1056.2	1941	171.7	1961	470.7	41
U-04.C1	2050-01	CORRAL CANYON	34-03-43	118-44-32		396	1950	1964	960.2	1958	187.0	1961	479.7	15
U-04.C2	6177-21	NEWTOWN CYN(MALIBU)-CARTER	34-05-00	118-47-39	01S/18W-5	533	1931	1936	759.9	1935	336.1	1933	600.7	4
U-04.C3	2867-01	ESCONDIDO CYN-PA-S-MALIBU	34-02-55	118-46-25	01S/18W-5	320	1932	1976	1139.9	1941	215.9	1948	516.9	28
U-04.C4	9990-12	ZUMA CYN PS	34-01-10	118-47-46		351	1941	1979	932.3	1978	114.0	1961	398.4	37
U-04.C6	4827-00	LATIGO CANYON BEACH	34-05-35	118-46-52	01S/19W-5	518	1940	1978	1368.5	1941	289.6	1961	620.3	38
	9990-02	ZUMA BEACH	34-01-15	118-49-42		5	1931	1979	691.0	1952	129.3	1961	372.8	35
	4990-11	ZUMA CYN-OAKLEY	34-04-58	118-49-38		457	1935	1979	1460.0	1941	232.8	1961	667.0	43
	4867-00	LECMUZA PATROL STN	34-04-38	118-52-47	01S/19W-5	488	1933	1980	1306.4	1941	217.8	1961	582.9	45
	5038-11	LOOMIS RCH ALDER CR	34-20-55	118-02-55	03N/11W-5	1311	1930	1979	1030.2	1941	46.3	1974	458.9	49
U-04.C7	7255-51	RATTLESNAKE CANYON	34-05-00	118-51-55		393	1954	1978	1089.9	1978	216.7	1961	556.4	25
	7354-30	REEDER RCH-ARROYO SEQUIT	34-48-00	118-52-00	01S/19W-5	274	1931	1934	486.2	1932				
	7033-01	TRANCAS BEACH	34-01-50	118-50-32		5	1965	1969	632.9	1969	111.1	1968	372.3	4
	6270-80	VAUGHAN RANCH-ST MONICA M	34-05-28	118-52-04	01S/19W-5	497	1930	1932	507.5	1931				
U-04.D2	9390-02	ZUMA BEACH	34-01-15	118-49-42		5	1973	1975	437.5	1973	350.1	1975	393.8	2
	5269-20	MALIBU-DECKER RANCH	34-04-08	118-53-37	01S/19W-5	328	1951	1953	1003.0	1952	280.0	1951	552.2	3
	6158-20	NICHOLAS CYN	34-02-52	118-54-57		104	1965	1976	504.3	1969	248.1	1976	400.2	8
	9330-30	ARROYO SEQUIT-RASON ESTAT	34-05-13	118-53-27	01S/19W-5	352	1931	1948	1201.5	1941	382.8	1933	596.4	16
U-04.D6	2314-80	DEALS FLATS - S.M. MTNS	34-05-16	118-58-05	01S/20W-5	436	1975		454.9	1975				
U-05.A1	5193-30	LUNADA BAY	33-46-37	118-25-15		76	1965	1977	362.7	1959	158.2	1976	278.9	7
	6663-12	PALOS VERDES HILLS FS	33-45-25	118-21-11		389	1947	1978	722.1	1978	88.9	1964	324.4	29
	6663-14	PALOS VERDES HILLS HB	33-45-40	118-22-20		366	1966	1969	638.0	1969	342.6	1968	487.5	3
	7036-11	POINT VICENTE L												

TABLE 8. PRECIPITATION STATIONS BY AREAL CODE (continued)

AREAL CODE	DWR STATION NUMBER	STATION NAME	LATITUDE DEG MIN SEC	LONGITUDE DEG MIN SEC	TOWNSHIP & RANGE	ELEVATION	RECORD		MAXIMUM PRECIPITATION		MINIMUM PRECIPITATION		MEAN ANNUAL	YEARS ON RECORD	
							YEAR BEGIN	YEAR END	MAX ANNUAL	YEAR OCCUR	MIN ANNUAL	YEAR OCCUR			
U-05.42	4200-11	INGLEWOOD - FIRE STATION	33-57-54	118-21-15	025/14W-5	41	1930	1979	841.0	1941	125.7	1961	340.9	49	
	4640-00	LA FRESA S C E CO	33-52-07	118-19-55	035/14W-5	20	1947	1978	714.6	1978	115.6	1961	294.1	32	
	4839-65	LAWDALE F S	33-53-53	118-20-35		18	1965	1974	377.9	1966	339.5	1974	355.4	3	
	5080-00	LONG BEACH PUB SVC	33-47-00	118-12-00		3	1973								
	5082-00	LONG BEACH	33-46-29	118-11-30	055/13W-5	19	1921	1972	739.4	1941	87.9	1961	307.9	50	
	5082-05	LB-ALAMITOS LAND CO	33-46-06	118-11-26		55	1930	1979	705.0	1941	79.4	1961	307.0	48	
	5082-06	LB-CITY AUTOMATIC	33-47-16	118-12-08		3	1944	1977	491.8	1958	95.4	1961	264.2	34	
	5082-08	LB NO 1	33-46-46	118-08-36		5	1944	1977	536.5	1969	79.0	1961	277.3	34	
	5082-09	LB NO 6	33-45-44	118-08-23		8	1944	1963	488.4	1958	75.1	1961	245.5	20	
	5082-13	LB-VETS MEN BLDG	33-46-10	118-11-37		21	1965	1976	329.4	1966	172.4	1976	284.2	8	
	5084-50	LONG BEACH CITY MALL	33-46-12	118-11-32		35	1930	1977	632.2	1941	80.7	1961	285.9	48	
	5114-00	LOS ANGELES-WSO AIRPORT	33-56-32	118-23-12	035/14W-5	32	1945	1960	672.4	1978	122.7	1961	299.2	32	
	5298-31	MANHATTAN BEACH-M.B.U.D.	33-53-00	118-23-19	035/14W-5	55	1965	1977	463.9	1969	263.0	1968	341.1	5	
	6663-00	PALOS VERDES ESTATES	33-48-02	118-23-26	045/14W-5	66	1930	1980	725.7	1978	104.7	1964	309.6	50	
	6663-01	PALOS VERDES	33-46-34	118-20-36		149	1965	1969	641.6	1969	277.3	1968	476.3	3	
	7324-00	REDONDO BEACH-CITY MAIN	33-50-43	118-23-20	045/14W-5	21	1930	1979	673.0	1941	101.8	1934	297.6	50	
	7534-05	ROLLING HILLS	34-46-47	118-20-35		122	1940	1979	950.9	1941	135.4	1961	371.7	39	
	7534-12	ROLLING HILLS E F GATE	33-45-37	118-19-47		251	1952	1963	745.3	1958	181.8	1961	394.4	12	
	7554-50	ROSECRANS RANCH-GARDENA	33-54-07	118-17-29	035/13W-5	20	1930	1948	725.1	1941	148.8	1948	364.2	16	
	7876-00	SAN PEDRO-MARINE EXC VM 1	33-43-15	118-16-17	055/13W-5	2769	1889	1964	562.1	1958	107.6	1961	265.3	91	
	7876-11	SAN PEDRO HILLS	33-46-30	118-22-58		378	1930	1965	804.9	1941	157.6	1961	359.4	33	
	7876-21	SAN PEDRO RES	33-44-37	118-17-47		46	1945	1979	784.1	1978	95.7	1961	306.3	34	
	8230-00	SIGNAL HILL FC 415	33-47-49	118-10-03		30	1937	1979	696.4	1941	82.9	1961	303.0	41	
	8899-00	TERMINAL ISLAND	33-42-00	118-16-00		0	1948	1961	625.8	1958	142.0	1959	366.3	12	
	8973-00	TORRANCE	33-48-00	118-20-00		30	1930	1980	756.5	1978	43.2	1947	324.5	47	
	8973-01	TORRANCE - FIRE DEPT	33-49-52	118-19-41	045/14W-5	26	1946	1961	528.3	1958	106.5	1961	248.1	15	
	8973-03	TORRANCE AIRPORT	33-47-59	118-20-08		31	1965	1977	578.1	1969	290.0	1968	409.5	5	
	8973-08	TORRANCE SCEC	33-51-30	118-18-36		17	1930	1946	753.4	1941	190.8	1934	347.9	16	
	U-05.43	9438-20	WALTERIA LAKE PUMP ST	33-48-35	118-21-05		27	1965	1974	421.8	1969	229.5	1968	307.4	5
		0619-00	BEL AIR HOTEL-FC 10	34-05-11	118-26-45	015/15W-5	165	1930	1980	1125.4	1978	175.3	1961	484.6	50
		0619-05	BEL AIR BAY CLUB-PAC PAL	34-02-28	118-32-45	015/16W-5	29	1932	1954	841.6	1941	153.0	1948	385.2	26
		1405-11	CARD JOSEPH-B.S.A.	34-04-51	118-31-10	015/16W-5	201	1953	1978	1251.3	1978	246.0	1961	560.9	19
		1932-50	CLOUDCROFT DEBRIS BASIN	34-02-58	118-34-12		107	1976	1977	355.6	1977	221.0	1976	288.3	2
		2214-00	CULVER CITY-FIRE STATION	34-01-17	118-23-41	025/14W-5	32	1911	1979	773.5	1941	152.5	1961	355.4	42
		3315-05	GARAPITO CREEK	34-07-33	118-33-20		564	1965	1969	898.7	1969	386.7	1968	640.7	4
		3971-00	HILLCREST COUNTY CLUB-L A	34-02-54	118-24-06	015/15W-5	56	1941	1979	998.0	1978	133.1	1961	395.7	37
4499-10		KENTER CANYON-259N.KENTER	34-03-45	118-28-51	015/15W-5	127	1948	1969	833.0	1952	184.4	1961	420.3	22	
5296-11		MANDEVILLE CYN ROAD-3351	34-06-24	118-30-10	015/16W-5	354	1930	1978	1042.3	1969	214.4	1948	530.0	37	
5296-12		MANDEVILLE CYN-FIRE RD 24	34-07-38	118-30-03	014/16W-5	495	1948	1969	1063.2	1969	201.6	1948	467.3	19	
5382-21		MAR VISTA (L.A.)-S.C.W.C.	34-00-49	118-25-32	025/15W-5	28	1941	1969	601.9	1952	125.8	1961	340.6	28	
5979-21		MOUNT ST MARYS COLLEGE-LA	34-05-10	118-28-57	015/15W-5	312	1931	1974	3377.2	1960	225.3	1961	605.0	37	
6028-15		MULHOLLAND DR KIRKMAN	34-07-32	118-28-42		404	1948	1965	922.7	1952	226.0	1961	425.7	17	
6599-61		PACIFIC PALISADES	34-02-38	118-31-36		98	1945	1979	1013.4	1978	193.7	1961	388.5	31	
6640-71		PALMS-POLLARD	34-01-25	118-24-21	025/15W-5	28	1932	1935	486.7	1935	310.1	1933	376.6	3	
6727-01		PASEO MIRAMAR-ST YNEZ CYN	34-03-08	118-33-21	015/16W-5	163	1948	1969	633.7	1952	149.9	1959	331.7	16	
7609-11		RUSTIC CANYON-STA MON MTH	34-03-06	118-30-32	015/16W-5	81	1948	1978	858.8	1978	172.5	1948	396.5	24	
7950-30		SANTA MONICA-CITY MALL	34-00-43	118-29-27	025/15W-5	20	1931	1979	825.2	1941	150.9	1948	365.3	47	
7950-14		SANTA MONICA - OUTLOOK	34-01-06	118-29-50	025/15W-5	30	1935	1958	481.4	1941	162.2	1948	396.3	23	
7950-70		SANTA MONICA-SPRR-TOWNER	34-00-48	118-29-25	025/15W-5	18	1885	1922	627.0	1886	176.5	1899	382.1	37	
7953-00		SANTA MONICA-PIER	34-30-27	118-29-55	025/15W-5	5	1937	1980	620.0	1958	113.2	1948	309.7	37	
7976-01		SANTA YNEZ CYN-TEM.F.R.30	34-06-32	118-33-31	015/16W-5	604	1948	1963	981.5	1952	195.7	1961	409.4	16	
7976-40		SANTA YNEZ CYN-GLOSSER	34-04-08	118-33-34	015/16W-5	152	1931	1944	1229.9	1941	393.2	1933	636.7	13	
7979-50		SANTA YNEZ RESERVOIR	34-04-23	118-33-59		223	1976	1977	343.3	1977	227.1	1976	285.2	2	
8023-01		SAWTELLE	34-02-44	118-27-05		71	1930	1977	903.7	1941	140.4	1961	417.3	43	
8023-23		SAWTELLE-NA MILITARY HOME	34-03-21	118-27-20	015/15W-5	105	1930	1979	868.4	1941	158.0	1961	404.5	47	
8092-03		SEPULVEDA CYN-BELLARIO RD	34-04-50	118-28-12	015/15W-5	174	1948	1969	866.1	1969	213.0	1961	476.8	20	
8092-04		SEPULVEDA CYN-E FIRE RD19	34-06-25	118-28-26	015/15W-5	396	1948	1969	854.9	1966	198.0	1961	426.7	20	
8092-11		SEPULVEDA CYN-MULHOLLAND	34-07-51	118-29-76	01M/15W-5	434	1928	1979	1218.8	1941	192.2	1961	511.4	49	
8574-04		STONE CYN-SELKIRK LANE	34-06-42	118-26-55	015/15W-5	274	1948	1969	877.3	1969	196.7	1961	444.7	22	
8574-05		STONE CANYON RES-LAW-P	34-06-21	118-27-13	015/15W-5	264	1930	1979	1180.5	1978	201.8	1961	517.7	48	
8637-01		SULLIVAN CANYON	34-07-19	118-30-52		447	1948	1969	1089.8	1969	212.9	1951	450.8	21	
9152-00		U.C.L.A. - WESTWOOD	34-04-10	118-26-30	015/15W-5	131	1933	1980	997.8	1941	163.1	1936	442.4	47	
9187-11		UPPER STONE CANYON	34-07-27	118-27-15	01M/15W-5	287	1948	1978	945.3	1959	180.5	1961	448.0	27	
9279-02		VENICE-LAFD FIRE STATION	33-59-32	118-27-39	025/15W-5	17	1930	1977	889.0	1941	135.6	1961	349.7	44	
U-05.44	9279-70	VENICE-SUNSET PIER-BERNAL	33-59-02	118-28-16	025/15W-5	11	1940	1945	843.8	1941	282.3	1942	431.4	6	
	9500-30	WESTWOOD UCLA	34-04-10	118-26-30		131	1977		374.0	1977					
	3663-04	GRIFFITH PARK-S.SLOP.M.MD	34-07-36	118-18-01	01M/14W-5	427	1930	1961	997.7	1941	180.4	1961	424.4	31	
	3663-05	GRIFFITH PARK-TUNNEL	34-07-24	118-18-11	01M/14W-5	315	1930	1961	1022.8	1941	171.1	1961	427.1	31	
	3663-39	GRIFFITH FERN DELL	34-07-12	118-18-18		229	1948	1978	770.4	1952	150.5	1961	357.5	25	
	4031-11	HOLLYWOOD	34-05-28	118-19-30		93	1930	1963	793.9	1941	157.1	1961	392.9	34	
	4231-33	HOLLYWOOD-LURSON CANYON	34-06-51	118-21-13	015/14W-5	343	1930	1946	1023.4	1941	277.1	1930	508.1	17	
	5159-00	LOWER FRANKLIN RES-LAW-P	34-05-43	118-24-40	015/15W-5	178	1949	1978	957.1	1978					

TABLE 8. PRECIPITATION STATIONS BY AREAL CODE (continued)

AREAL CODE	DWR STATION NUMBER	STATION NAME	LATITUDE DEG MIN SEC	LONGITUDE DEG MIN SEC	TOWNSHIP & RANGE	ELEVATION	RECORD		MAXIMUM PRECIPITATION		MINIMUM PRECIPITATION		MEAN ANNUAL	YEARS OF RECORD
							YEAR BEGIN	YEAR END	ANNUAL OCCUR	YEAR OCCUR	ANNUAL OCCUR	YEAR OCCUR		
U-09.43	0632-70	BELLFLOWER-ANTHONY	33-53-30	118-07-13		23	1940	1943	733.9	1941	302.5	1940	518.2	2
	0632-89	BELLFLOWER-MC CLURG	33-52-44	118-07-31		21	1930	1964	825.4	1941	99.7	1961	335.1	32
	0722-11	BEVERLY HILLS - CITY HALL	34-04-27	118-23-57	01S/15W-5	88	1930	1979	1005.4	1941	157.8	1961	437.6	48
	1954-11	COMPTON FIRE STA	33-53-42	118-13-34		24	1930	1979	784.9	1978	111.3	1961	336.4	49
	2494-00	DOWNNEY FIRE DEPT	33-56-18	118-08-03		35	1930	1980	880.9	1978	109.2	1961	371.9	50
	2494-02	DOWNNEY-JORDAN	33-57-38	118-08-07		40	1937	1964	869.7	1941	102.8	1961	358.8	27
	2655-00	EAST WHITTIER-SHARPLES RA	33-57-33	118-01-49	02S/11W-5	66	1930	1950	846.6	1941	221.7	1948	388.9	21
	2655-01	EAST WHITTIER-MILTON	33-57-12	117-59-56	02S/11W-5	92	1930	1964	774.8	1941	125.4	1961	354.7	35
	3953-52	HIGHLAND PK	34-07-57	118-10-27		259	1935	1961	1119.6	1941	198.9	1961	471.2	27
	4180-11	HUNTINGTON PARK-FIRE STA	33-59-00	118-13-47	02S/13W-5	53	1930	1979	861.8	1941	127.5	1961	362.5	48
	4697-11	LAGUNA BELL SS	33-58-37	118-08-48		43	1931	1979	883.9	1941	86.4	1961	360.7	47
	4727-11	LAKEWOOD	33-51-45	118-07-43		17	1965	1966						
	4732-11	LA MIRADA	33-53-15	118-00-56	03S/11W-5	26	1926	1979	877.4	1941	90.5	1961	332.1	53
	4887-51	LEIMERT PARK-BENJAMIN	34-00-39	118-19-10	02S/14W-5	38	1932	1933						
	5082-10	LB SAN ANSELMO	33-49-35	118-07-12		12	1965	1974	340.1	1966	240.0	1968	289.0	3
	5082-11	LB-60TH + LINDEN	33-51-48	118-11-06		15	1944	1968	522.2	1952	108.0	1961	293.2	25
	5082-12	LB-37TH + GAVIOTA	33-49-28	118-10-14		22	1944	1979	524.1	1958	94.0	1961	288.4	30
	5082-20	LONG BEACH-WOODRUFF AVE	33-48-48	118-06-55	04S/12W-5	8	1954	1969	557.2	1969	63.2	1961	289.9	15
	5089-00	LONG BEACH WB AP	33-49-00	118-09-00		11	1957	1980	666.9	1978	85.7	1961	300.5	21
	5111-00	LOS ANGELES-CENTRAL BLDG	34-02-43	118-14-59	01S/13W-5	127	1942	1958	685.3	1952	177.8	194	326.6	12
	5111-01	LOS ANGELES-CITY COLLEGE	34-05-19	118-17-34	01S/14W-5	102	1933	1979	909.2	1941	155.0	1961	402.8	46
	5111-02	LOS ANGELES-CLARK MEM LIB	34-02-00	118-18-46	01S/14W-5	62	1931	1979	853.5	1962	126.7	1961	372.1	46
	5111-03	LOS ANGELES-96TH-CENTRAL	33-56-56	118-15-17	02S/13W-5	37	1931	1979	787.2	1941	36.5	1974	336.0	47
	5111-04	LOS ANGELES-DUCOMMUN-LAMP	34-03-10	118-14-13	01S/13W-5	82	1942	1980	800.8	1978	142.0	1961	369.6	35
	5111-05	LOS ANGELES-8TH+CROCKER S	34-02-23	118-14-46	01S/13W-5	76	1948	1956	646.4	1952	170.9	1948	302.4	9
	5111-06	LOS ANGELES-MAC QUEEN	34-04-13	118-19-23	01S/14W-5	69	1951	1969	747.1	1952	141.9	1961	402.7	18
	5111-07	LOS ANGELES-OLD LAMP OFF	34-03-09	118-14-46	01S/13W-5	117	1930	1969	878.8	1941	137.7	1961	368.4	36
	5111-13	LOS ANGELES-DUCOMMUN BLDG	34-03-15	118-14-20	01S/13W-5	86	1977		295.9	1977				
	5111-17	LOS ANGELES-MANCOCK PARK	34-03-50	118-21-35	01S/14W-5	53	1930	1979	929.5	1978	45.3	1974	389.1	48
	5111-20	L.A.-SLAUSON-LONG BEACH A	33-59-20	118-14-36	02S/13W-5	54	1941	1947	827.5	1941	286.0	1946	430.1	7
	5112-00	LOS ANGELES-TERRIMAL ANNE	34-03-33	118-14-07	01S/13W-5	89	1940	1954	892.3	1941	203.2	1948	401.6	13
	5112-40	LOS ANGELES-B-FIGUEROA	34-03-55	118-13-38		102	1944	1952	736.9	1952	197.6	1948	363.6	8
	5112-75	L.A.-30TH+TRINITY STREETS	34-01-10	118-15-51	02S/13W-5	63	1941	1947	827.5	1941	282.0	1946	432.3	7
	5114-20	LOS ANGELES CRISLER	34-03-19	118-17-25		72	1941	1954	1214.8	1941	229.8	1949	475.9	10
	5114-71	LOS ANGELES-PARKINSON	33-57-56	118-18-24	02S/14W-5	53	1939	1961	920.3	1941	119.6	1961	357.1	23
	5114-91	LOS ANGELES-MANCOCK	34-04-17	118-16-04	01S/13W-5	122	1941	1951	928.8	1941	198.0	1948	400.3	10
	5115-00	LOS ANGELES CIVIC CENTER	34-03-10	118-14-13	01S/13W-5	82	1872	1980	969.7	1884	125.4	1961	385.5	108
	5115-50	LOS ANGELES-UNIV SO CALIF	34-01-14	118-17-15	02S/13W-5	63	1943	1979	798.7	1978	104.2	1972	342.9	36
	5115-85	LOS ANGELES-WOOD	34-04-13	118-19-08	01S/14W-5	61	1940	1950	890.5	1941	179.2	1948	373.1	11
	5360-51	MARAS PASTURES-PUENTE MIL	34-01-55	118-04-57	02S/12W-5	163	1935	1938	722.6	1938	289.9	1936	566.9	3
5786-11	MONTANA RANCH	33-50-35	118-07-09		14	1930	1979	791.2	1941	98.8	1961	327.7	50	
5787-21	MONTESBELLO-CHAMBER OF COM	34-00-40	118-06-45	02S/12W-5	59	1930	1934	384.1	1932	270.2	1933	311.9	5	
5787-31	MONTESBELLO FO	34-00-40	118-06-15		66	1935	1979	858.3	1941	144.6	1961	382.4	43	
5800-51	MONTESBELLO PARK FS	34-02-27	118-07-42		93	1931	1979	878.4	1978	130.4	1961	394.0	47	
6282-11	MORWALK	33-53-52	118-04-00		26	1930	1973	793.9	1941	100.8	1961	352.2	40	
6889-51	PARAMOUNT-CD FS	33-53-30	118-09-36		21	1935	1977	785.1	1941	105.2	1961	326.7	39	
6855-13	PICO CAFE	34-00-13	118-05-08		55	1944	1955	690.9	1952	224.5	1951	333.5	10	
6856-21	PICO RIVERA	33-59-20	118-04-58		52	1937	1959	840.5	1941	170.4	1959	398.5	23	
7247-51	RANCHO LOS AMIGOS	33-55-18	118-09-44		27	1930	1969	817.2	1941	100.4	1961	345.0	39	
7441-11	RIO MONDO SPREAD GRND	33-59-25	118-06-33	02S/12W-5	47	1948	1978	770.9	1978	109.0	1961	339.8	31	
7459-11	RIVERA	33-57-25	118-06-06		44	1932	1956	838.0	1941	202.7	1951	376.6	24	
7459-31	RIVERA - MADLEY RANCH	33-58-42	118-06-08	02S/12W-5	47	1941	1955	912.7	1941	222.6	1951	400.3	14	
7459-80	RIVERA - ROBINSON	33-58-10	118-06-05	02S/12W-5	46	1930	1942	839.2	1941	260.4	1933	418.1	10	
8177-01	SOUTH GATE	33-57-16	118-12-16		35	1942	1977	616.3	1952	133.3	1961	333.4	31	
9052-01	TURNBULL DEBRIS BAS	33-59-18	118-01-30		151	1965	1977	480.1	1967	275.2	1977	342.6	6	
9473-70	WATTS-JORDAN HIGH SCHOOL	33-56-37	118-13-45	03S/13W-5	34	1930	1955	894.0	1941	135.4	1948	380.7	22	
9554-50	WESTERN AVE TAMM-LAMP	33-56-54	118-16-35	02S/14W-5	72	1930	1945	856.0	1941	268.7	1936	446.2	13	
9660-00	WHITTIER CITY HALL	33-58-30	118-01-57	02S/11W-5	98	1928	1980	943.6	1978	127.7	1961	370.2	53	
9660-02	WHITTIER-CATE	34-00-20	118-03-10		85	1965	1977	633.4	1969	276.3	1976	390.1	6	
9660-09	WHITTIER-WOOD	33-59-52	118-03-10		85	1951	1978	845.6	1978	138.2	1961	371.7	28	
9660-00	WHITTIER NARROWS DAM	34-01-15	118-04-00	02S/11W-5	76	1973	1978	770.0	1978	256.4	1977	422.0	5	
9660-09	WHITTIER NARROWS DAM	34-01-15	118-04-00	02S/11W-5	76	1965	1974	481.4	1966	295.2	1968	393.8	4	
9660-15	WHITTIER NARROWS - CATE	34-00-54	118-04-25	02S/11W-5	59	1930	1944	827.5	1941	256.7	1933	452.2	14	
9660-21	WHITTIER-SPRR	33-59-00	118-03-00	02S/11W-5	75	1930	1937	567.1	1937	260.7	1933	367.4	8	
U-09.40	2667-11	ECHO PARK-LA	34-05-02	118-15-11		145	1948	1977	731.2	1969	142.7	1961	347.4	29
	3953-53	HIGHLAND PK-LINDSAY	34-07-06	118-10-39		189	1935	1979	1112.6	1941	164.4	1961	459.9	43
	8252-15	SILVER LAKE RES-FL PAN-30	34-06-08	115-15-54	01S/13W-5	137	1975		393.4	1975				
	9152-01	UNIV SO CAL	34-01-14	118-17-15		63	1965	1969	588.8	1969	363.5	1968	465.6	3
U-09.81	0115-00	ALISO CANYON CAT MTH	34-18-53	118-33-25	03N/16W-5	721	1940	1980	1335.0	1941	223.0	1946	576.4	39
	0624-60	BELL CR-DRY GULCH RANCH	34-11-22	118-39-30	01N/17W-5	288	1973	1974	453.6	1973	370.6	1974	412.1	2
	0624-80	BELL CANYON-PLATT RANCH	34-11-42	118-39-27	01N/17W-5	279	1977		370.1	1977				
	0625-30	BELL CANYON-RUSHWORTH	34-11-37	118-39-27	01N/17W-5	282	1968	1975	317.6	1975	217.5	1968	277.6	2
	0625-40	BELL CANYON-WOODRUFF RANC	34-12-37	118-38-39	02N/17W-5	293	1930	1945	931.1	1941	273.6	1933	465.7	15

TABLE 8. PRECIPITATION STATIONS BY AREAL CODE (continued)

AREAL CODE	DWR STATION NUMBER	STATION NAME	LATITUDE DEG° MIN' SEC"	LONGITUDE DEG° MIN' SEC"	TOWNSHIP & RANGE	ELEVATION	RECORD		MAXIMUM PRECIPITATION		MINIMUM PRECIPITATION		MEAN ANNUAL	YEARS OF RECORD
							YEAR BEGN	YEAR END	MAX. ANNUAL	YEAR OCCUR	MIN. ANNUAL	YEAR OCCUR		
U-05.81	1682-00	CHATS WORTH RESERVOIR	34-13-34	118-30-58	02N/17W-5	278	1930	1979	910.9	1941	167.9	1972	387.4	49
	1682-11	CHATS WORTH PAT STA	34-16-39	118-30-13		382	1953	1979	917.7	1978	180.4	1961	445.8	26
	2401-20	DEPT W P E VALLEY	34-12-30	118-24-35		238	1965	1969	621.5	1969	332.3	1968	478.6	4
	2406-51	DESOTO RESERVOIR	34-16-17	118-33-12		344	1949	1978	907.2	1978	159.3	1961	414.1	30
	2633-50	EAST VALLEY-LAND	34-12-30	118-24-35		238	1976	1977	380.6	1977	246.5	1976	313.7	2
	2701-15	EL CABALLERO COM CLUB	34-08-52	118-31-53		305	1965	1977	874.4	1969	251.1	1976	522.7	7
	2823-11	FLYSIAN PARK FS	34-04-55	118-14-22		213	1949	1977	626.3	1969	122.2	1961	305.3	27
	2829-11	ENCINO	34-08-15	118-30-57		378	1974		459.5	1974				
	2830-05	ENCINO-QUIRELLO	34-09-12	118-30-18	01N/16W-5	290	1940	1946	1219.3	1944	325.2	1945	657.4	7
	2830-11	ENCINO RESERVOIR	34-08-57	118-30-55	01N/16W-5	305	1931	1980	1087.4	1978	188.0	1949	445.6	48
	3430-00	GIRARD BRANT RANCH	34-10-16	118-35-56		268	1930	1979	922.4	1978	126.5	1961	382.1	47
	3430-11	GIRARD RESERVOIR	34-09-07	118-36-35		301	1930	1979	1121.8	1941	164.2	1961	446.3	47
	3450-00	GLENDAL STAPENHORST	34-09-07	118-15-40	01N/13W-5	162	1931	1971	1057.4	1941	153.7	1961	443.1	40
	3450-01	GLENDAL-JONES	34-09-54	118-15-05		187	1930	1979	982.7	1944	168.1	1961	344.6	49
	3450-02	GLENDAL-MCINTYRE	34-09-00	118-14-27		184	1941	1977	1014.6	1941	164.4	1961	429.7	33
	3450-03	GLENDAL-OPID	34-09-29	118-14-25		199	1936	1956	988.2	1941	210.9	1948	460.6	20
	3535-00	GRANADA HILLS-STRATHAUS	34-17-09	118-30-59	02N/16W-5	390	1930	1975	1013.6	1941	177.1	1961	461.6	41
	3663-02	GRIFFITH PK N SLOPE	34-07-48	118-18-07		488	1930	1961	1088.9	1941	169.9	1961	461.2	31
	3663-03	GRIFFITH PK NURSERY	34-07-18	118-17-04		259	1930	1979	962.4	1978	161.9	1961	431.0	47
	3663-07	GRIFFITH UPR SPRING	34-07-48	118-17-36		366	1948	1963	875.6	1952	155.7	1961	380.8	14
	3663-09	GRIFFITH LIT CN	34-07-30	118-17-00		274	1948	1978	813.0	1952	148.4	1961	385.6	25
	3663-10	GRIFFITH LWR MINERAL	34-08-48	118-17-48		191	1948	1969	937.8	1952	159.5	1961	414.7	22
	3663-11	GRIFFITH UPR MINERAL	34-08-36	118-18-06		290	1948	1961	851.4	1952	161.8	1961	351.0	14
	3663-12	GRIFFITH LVR SPRING	34-08-00	118-17-24		183	1948	1978	881.0	1952	155.4	1961	384.7	23
	3751-00	HANSEN DAM-BORDEN-GLAMIS	34-16-08	118-23-59	02N/15W-5	338	1939	1979	914.0	1978	164.6	1961	368.2	36
	3874-51	HEADWORKS PUMP PLT	34-09-21	118-18-20		143	1930	1977	1054.9	1941	162.4	1961	450.1	41
	4032-11	MOLLYWOOD DAM	34-07-04	118-19-55		229	1930	1979	961.6	1941	171.5	1961	421.2	49
	4621-35	LA CANADA IRRIGATION DIST	34-13-39	118-12-40		616	1930	1979	1369.0	1978	245.7	1960	607.8	45
	4749-21	LANKERSHIM P P	34-11-39	118-23-17		219	1965	1975	700.2	1969	359.6	1968	479.5	7
	4782-50	LA TUNA DEBRIS DAM	34-14-13	118-19-37		354	1976	1977	431.9	1977	358.0	1976	395.0	2
	4833-00	LATUNA CANYON	34-14-20	118-20-27		373	1965	1969	524.6	1966	352.1	1968	465.6	3
	5098-20	LOPEZ CYN BL MOUTH-HINKLE	34-17-03	118-24-28	02N/15W-5	359	1938	1955	929.7	1941	180.4	1948	422.0	18
	5452-11	MC CLURE DEBRIS BAS	34-12-42	118-19-36		308	1965	1969	507.7	1966	291.0	1968	429.0	3
	6256-00	NORTH MOLLYWOOD	34-09-23	118-21-56		189	1930	1979	970.9	1941	166.6	1949	420.2	49
	6256-70	NORTH MOLLYWOOD PUMP PLT	34-11-39	118-23-17		219	1930	1979	957.4	1978	137.4	1949	366.4	49
	6270-11	NORTH RIDGE-LAMP V. VALL YD	34-13-52	118-32-28	02N/16W-5	247	1930	1979	973.9	1941	131.6	1961	384.0	49
	6270-25	NORTH RIDGE CSU FAB	34-14-19	118-31-33		255	1980		663.0	1980				
	6363-63	OAT MOUNTAIN LOOKOUT	34-19-45	118-36-00		1140	1975	1977	435.1	1977	406.4	1975	420.8	2
	6444-50	ONEOTA RANCH-SAN FERNANDO	34-16-10	118-26-00	02N/15W-5	306	1935	1940	576.5	1937	333.8	1936	479.2	4
	6486-70	ORCUTT RANCH-WILLET	34-19-28	118-34-14	03N/16W-5	869	1949	1979	1472.9	1978	266.7	1961	639.3	28
	6601-61	PACIOIMA RADDATZ	34-14-57	118-26-40		275	1930	1974	899.7	1941	152.3	1961	387.0	40
	6601-71	PACIOIMA WAREHOUSE	34-15-21	118-24-24		291	1931	1978	955.4	1941	165.3	1961	389.1	46
	7372-10	RESEDA - ADOOR DAIRY(OLD)	34-09-57	118-31-34	01N/16W-5	247	1930	1960	1084.4	1941	181.8	1949	414.3	31
	7553-11	ROSCE MERRILL	34-14-19	118-21-33		320	1930	1979	986.1	1978	173.0	1961	390.2	49
	7759-00	SAN FERNANDO	34-16-22	118-27-50	02N/15W-5	294	1877	1974	866.2	1884	98.4	1899	397.5	92
7760-10	SAN FNDQ V CSU NORTH RIDGE	34-14-17	118-31-48		261	1965	1978	844.5	1978	192.6	1976	450.2	9	
7762-00	SAN FERNANDO PH WD 3	34-18-49	118-29-30		380	1948	1978	989.1	1978	209.8	1949	450.5	14	
8092-00	SEPULVEDA DAM-C.O.E -RRNG	34-10-06	118-28-11	01N/15W-5	226	1939	1978	1001.0	1941	133.0	1949	345.2	28	
8092-01	SEPULVEDA-GREEN ARROW MUR	34-13-52	118-28-04	02N/15W-5	252	1930	1979	975.1	1941	157.2	1961	388.0	49	
8092-05	SEPULVEDA DAM-8.81 RECEIV	34-09-42	118-27-59	01N/15W-5	210	1941	1979	1001.0	1941	134.3	1949	372.4	36	
8104-51	SHERMAN OAKS-ICAMUENGA PK	34-08-37	118-27-38	01N/15W-5	274	1930	1941	1217.7	1941	293.6	1934	551.8	9	
8252-11	SILVER LAKE RES	34-06-08	118-15-54	01S/13W-5	139	1931	1979	883.4	1941	147.8	1961	393.8	47	
8574-03	STONE CYN NORTH-VALLEY SI	34-08-02	118-27-32	01N/15W-5	363	1948	1958	897.7	1952	240.1	1948	435.8	11	
8574-70	STONE CYN-S FERNAN V-RRNG	34-08-13	118-27-25	01N/15W-5	267	1944	1955	922.8	1952	214.8	1948	419.0	12	
8590-10	STOUGH PARK-BURBANK-CASTA	34-12-15	118-18-03	02N/14W-5	419	1965	1976	525.7	1974	308.8	1976	435.7	5	
8590-20	STOUGH PARK-BURBANK-GOLF	34-12-17	118-18-15	02N/14W-5	354	1977		432.8	1977					
8610-10	STUDIO CITY BEEMAN AVE	34-08-58	118-24-24		191	1977		436.6	1977					
8610-25	STUDIO CITY-GOODLAND	34-08-29	118-24-26		207	1948	1978	839.6	1952	178.3	1961	403.0	27	
8610-70	STUDIO CITY - THAYER	34-08-25	118-23-40	01N/14W-5	194	1940	1949	1119.6	1941	210.0	1948	483.9	10	
9680-01	SUNSET DAM	34-12-18	118-17-05		491	1930	1975	1149.1	1941	195.2	1961	477.2	38	
8727-25	SYCAMORE CANYON-BERGMAN	34-09-08	118-13-38	01N/13W-5	203	1930	1932	300.7	1930					
8727-25	SYCAMORE CYN-BURROUGHS	34-09-57	118-12-23	01N/13W-5	274	1931	1943	1216.1	1941	377.1	1942	612.8	11	
9160-05	UPLAND JORDAN	34-05-43	117-39-40	01S/07W-5	375	1892	1911	859.2	1893	212.4	1899	536.0	20	
9234-50	VAN ALDEN DEBRIS BASIN	34-08-56	118-33-18	01N/16W-5	267	1946	1947	302.4	1947					
9259-00	VAN NORMAN LK LWR DAM	34-17-18	118-28-54	02N/15W-5	351	1931	1979	929.9	1941	166.6	1961	442.4	48	
9259-20	VAN NORMAN LAKE UPPER	34-18-49	118-29-30		380	1932	1978	1082.7	1941	176.8	1961	464.9	46	
9260-00	VAN NUTS FC 158	34-10-48	118-27-03	01N/15W-5	212	1926	1980	1020.4	1941	158.9	1961	407.1	55	
9298-08	VEROUGO MT HILLCREST	34-10-48	118-15-38		366	1965	1967	626.3	1966	587.8	1967	607.1	2	
9298-11	VEROUGO PUMP STA	34-15-27	118-20-06	02N/14W-5	415	1965	1977	664.1	1969	326.5	1976	445.4	6	
9933-10	WEST BURBANK	34-10-47	118-20-07		187	1965	1977	735.2	1969	277.9	1976	487.9	7	
9784-00	WOODLAND HILLS	34-08-00	118-37-00		437	1973	1975	510.6	1973	353.6	1975	442.1	2	
0963-50	BEAR-DIVIDE USFS STATION	34-21-35	118-23-17		823	1976	1977	554.3	1976	529.0	1977	541.7	2	
U-05.82	2438-50	DILLONS RANCH-PACIOIMA CYN	34-20-44	118-21-24	03N/14W-5	625	1930	1938	881.3	1937	462.9	1933	609.9	8
	5256-51	MAGIC Mtn RIDGE-INDIAN CY	34											

TABLE 8. PRECIPITATION STATIONS BY AREAL CODE (continued)

AREAL CODE	OWNR STATION NUMBER	STATION NAME	LATITUDE DEG° MIN SEC'	LONGITUDE DEG° MIN SEC'	TOWNSHIP & RANGE	ELEVATION	RECORD		MAXIMUM PRECIPITATION		MINIMUM PRECIPITATION		MEAN ANNUAL	YEARS OF RECORD
							YEAR BEGIN	YEAR END	MAX. ANNUAL	YEAR OCCUR	MIN. ANNUAL	YEAR OCCUR		
U-09.83	0085-00	ALDER CRK PARADISE	34-19-48	118-19-03	03N/14W-5	710	1942	1974	903.1	1952	196.9	1961	465.9	28
	0507-11	BARLEY FLAT	34-16-43	118-04-38		1692	1965	1977	1661.9	1969	568.2	1968	942.3	7
	0797-50	BIG TUJUNGA CYN-CAMP 15	34-17-22	118-17-17	02N/13W-5	465	1940	1979	1215.7	1941	196.8	1972	529.9	21
	0797-60	BIG TUJUNGA-EDISON ROAD	34-18-20	118-09-33	03N/12W-5	745	1930	1947	1318.1	1941	398.0	1930	686.9	18
	1664-50	CHARLTON FLATS REL AREA	34-17-56	118-00-17	03N/11W-5	1650	1940	1944	1432.0	1941	508.7	1942	962.9	3
	1725-00	CHILAO USFS CAMP	34-20-00	118-01-23	03N/11W-5	1591	1940	1978	1252.9	1941	271.8	1951	554.0	36
	1896-00	COLBYS FC 330	34-18-02	118-06-39	03N/12W-5	1120	1898	1979	1690.7	1969	204.7	1899	736.8	80
	2091-50	COWANE RANCH	34-16-37	118-22-38	02N/14W-5	341	1930	1944	907.0	1941	317.5	1942	497.5	8
	3704-50	HAINESS DEBRIS BASIN	34-15-40	118-16-37	02N/13W-5	869	1933	1944	1152.4	1941	371.5	1942	650.4	12
	3947-11	MIDDEN SPRINGS	34-18-38	118-08-17		869	1965	1969	1227.0	1969	405.9	1967	738.4	4
	4296-03	IRON MOUNTAIN-SAN GAB MTH	34-21-06	118-13-46	03N/13W-5	1622	1965	1977	1380.9	1967	193.6	1977	860.4	6
	4440-05	KAGEL CANYON-KEITH	34-18-56	118-22-21	03N/14W-5	664	1930	1932	459.3	1931	311.7	1930	385.5	2
	4440-11	KAGEL CANYON P S	34-17-45	118-22-30		436	1944	1979	945.5	1978	191.6	1961	401.3	35
	4975-01	LITTLE GLEASON	34-22-46	118-09-03		1707	1966	1977	1346.8	1969	446.0	1977	784.4	7
	4985-70	LITTLE TUJUNGA ALDER CR	34-20-03	118-18-50		800	1977		423.8	1977				
	4986-00	LITTLE TUJUNGA-GOLD CREEK	34-18-57	118-18-02	03N/14W-5	838	1942	1978	859.1	1952	113.7	1949	436.4	28
	4986-01	LITTLE TUJUNGA RS	34-17-37	118-21-38		389	1965	1977	566.1	1967	376.7	1977	438.7	5
	4986-05	LITTLE TUJUNGA GOLD C	34-19-05	118-20-22		480	1965	1976	642.1	1966	389.1	1975	492.3	3
	4986-41	LITTLE TUJUNGA CYN-REESE	34-19-04	118-20-02	03N/14W-5	572	1930	1949	1212.1	1941	271.3	1948	559.7	20
	4986-46	LITTLE TUJUNGA CYN-SOLITO	34-19-54	118-20-37	03N/14W-5	579	1951	1959	905.9	1952	243.3	1959	494.8	9
	5098-25	LOPEZ CYN GD STA	34-17-54	118-23-41		411	1965	1969	657.1	1969	378.0	1968	545.2	3
	5788-90	MONTIE CRISTO MINES-HILL C	34-21-13	118-05-20	03N/12W-5	1372	1930	1937	755.3	1937	392.4	1934	630.4	3
	5789-20	MONTIE CHRISTO RANGER STA	34-19-42	118-07-20		1024	1976		422.4	1976				
	5793-61	MOUNT PACIFIC	34-22-40	118-01-44		2097	1975	1977	513.7	1975	438.3	1977	476.0	2
	8601-21	PACDIMA CANYON	34-20-53	118-22-25		632	1938	1977	1177.7	1941	450.3	1942	710.2	12
	8601-22	PACDIMA CYN-CITY RD	34-21-40	118-18-28		914	1946	1980	1595.5	1978	315.5	1960	681.6	29
	8601-24	PACDIMA CYN DUTCH	34-21-07	118-20-38	03N/14W-5	983	1941	1979	1275.5	1967	251.6	1961	585.4	36
	8290-00	SLEEPY HOLLOW CLBY RCH	34-18-00	118-07-00		1122	1931	1955	1412.5	1941	248.4	1951	719.7	23
	8660-00	SUNLAND - STEVENS	34-15-34	118-18-19	02N/14W-5	445	1957	1966	671.4	1958	181.4	1961	388.5	8
	8660-70	SUNLAND - ZITLOW	34-16-03	118-18-34	02N/14W-5	413	1939	1953	1000.1	1941	215.2	1951	468.3	11
	8662-00	SUNLAND TUJUNGA-STEVEN	34-15-43	118-17-33	02N/14W-5	515	1931	1979	1223.3	1941	213.9	1960	545.2	39
	9047-00	TUJUNGA - PARRA	34-16-22	118-17-35	02N/14W-5	515	1971	1980	1133.7	1978	242.8	1972	570.7	10
	9048-03	TUJUNGA CYN AB GOLD	34-18-00	118-16-06		503	1948	1966	953.3	1952	204.9	1961	397.3	19
	9048-05	TUJUNGA CYN-HONOR CAMP 5	34-17-59	118-09-35	03N/12W-5	1006	1941	1956	1135.1	1943	234.7	1951	554.6	15
	9048-07	TUJUNGA CYN-SOLOMON	34-16-42	118-17-43		457	1953	1968	718.7	1958	182.2	1961	390.6	16
	9048-10	TUJUNGA CYN-VOGEL	34-17-12	118-13-32		564	1940	1979	1665.7	1969	271.8	1961	694.5	39
	9048-15	TUJUNGA-MILL CR SUM	34-23-27	118-04-50		1509	1950	1978	1050.5	1978	229.3	1951	441.0	25
	9048-18	TUJUNGA-TANGUAT	34-16-03	118-17-50		489	1946	1960	802.6	1952	207.8	1960	398.2	14
	9049-00	TUJUNGA HILL CREEK	34-23-19	118-05-26	04N/12W-5	1417	1942	1975	781.0	1969	200.4	1959	402.1	33
	9675-37	WILWOOD LODGE-BIG TUJ CN	34-17-17	118-14-05	02N/13W-5	549	1928	1933	521.5	1931				
U-09.84	1090-15	BRIGGS TERRACE	34-14-17	118-13-27		671	1977		479.4	1977			624.9	8
	1982-01	COOKS CANYON	34-15-52	118-13-13		1036	1965	1976	1052.9	1969	427.9	1976	524.0	5
	1982-02	COOKS DEBRIS BASIN	34-14-52	118-13-43		640	1965	1977	627.0	1966	429.3	1968	524.0	5
	2333-00	DEER DEBRIS BASIN	34-11-33	118-14-28		366	1965	1977	705.9	1966	369.1	1976	511.2	6
	2571-11	DUNSMORE CANYON-UPPER	34-15-41	118-13-50		1349	1965	1976	919.3	1966	478.8	1968	629.6	7
	2571-21	DUNSMORE DEBRIS BAS	34-14-53	118-15-07		693	1965	1976	839.0	1966	457.5	1968	638.7	3
	2592-20	EAGLE DEBRIS BASIN	34-14-10	118-14-12		576	1965	1976	867.0	1967	463.9	1976	636.2	7
	3703-00	HAINESS CANYON LOWER	34-15-50	118-16-13	02N/13W-5	747	1933	1977	1348.0	1941	230.5	1961	621.5	40
	3704-00	HAINESS CANYON UPPER	34-16-18	118-15-07	02N/13W-5	1052	1933	1979	1567.7	1978	277.0	1960	721.6	46
	4628-11	LA CRESCENTA-CORDEPT	34-13-29	118-13-23		430	1952	1979	1408.9	1978	225.7	1961	587.5	28
	4629-10	LA CRESCENTA VERGITH	34-11-30	118-13-25		320	1977							
	5967-01	MT LUKENS	34-16-05	118-14-11		1332	1933	1979	1117.4	1969	216.9	1972	532.4	26
	6850-01	PICKENS DEBRIS BAS	34-13-15	118-13-45		488	1941	1975	1214.8	1941	231.6	1960	549.6	31
	9047-70	TUJUNGA-BEGUE RANCH	34-14-50	118-16-39	02N/13W-5	564	1935	1941	1285.7	1941	428.8	1936	770.0	6
	9298-20	VERDUGO MOUNTAIN-BODINE	34-12-28	118-18-17	02N/13W-5	861	1937	1939	868.7	1938	542.3	1939	723.2	3
2605-01	EAGLE ROCK SCEC	34-09-02	118-10-57		290	1940	1979	1171.9	1941	214.4	1961	471.7	38	
2605-02	EAGLE ROCK RES	34-08-47	118-11-22	01N/13W-5	294	1953	1979	926.7	1978	189.4	1961	412.5	24	
2605-20	EAGLE ROCK-WHL	34-08-21	118-11-20	01N/13W-5	235	1940	1943	1040.3	1941	340.7	1942	629.5	4	
8038-51	SCHOLL DEBRIS BAS	34-09-13	118-12-01		297	1965	1974	615.9	1967	360.7	1974	493.6	4	
0144-00	ALTADENA	34-10-55	118-08-15	01N/12W-5	343	1930	1980	1180.4	1941	202.2	1961	562.2	47	
0144-01	ALTADENA CHIESA	34-11-45	118-08-58	01N/12W-5	410	1930	1947	1241.5	1941	380.4	1942	601.0	18	
0144-02	ALTADENA-BARTON	34-11-20	118-07-21	01N/12W-5	407	1935	1947	1198.7	1941	377.7	1942	683.6	12	
0144-04	ALTADENA GOLF	34-10-48	118-07-01		361	1940	1978	1177.6	1941	148.7	1972	489.0	37	
0144-13	ALTADENA-CAITY	34-11-31	118-06-17	01N/12W-5	408	1938	1944	1219.2	1941	479.0	1940	826.4	5	
0144-20	ALTADENA-LINOVALL	34-11-26	118-06-32	01N/12W-5	415	1936	1943	1253.0	1941	395.1	1942	812.7	7	
0144-50	ALTADENA-VENTURA STREET	34-11-28	118-09-28	01N/12W-5	357	1937	1954	1200.0	1941	272.1	1948	579.8	10	
1067-10	BRIGDEM RES NO 1	34-10-15	118-06-40		311	1965	1974	1016.2	1969	395.8	1968	671.7	5	
1063-11	CHAPMAN WELLS	34-08-47	118-04-03		194	1930	1963	1050.6	1941	165.9	1961	495.2	34	
2600-11	EATON WASH DAM	34-10-06	118-05-33		268	1940	1979	1136.6	1978	176.3	1961	513.8	39	
2770-11	EL MIRADOR RANCH	34-09-48	118-10-53		341	1933	1964	1228.6	1941	216.5	1949	518.3	31	
3091-00	FLINTRIDGE F S	34-10-57	118-11-47		410	1931	1979	1297.2	1941	219.9	1961	540.1	48	
3091-10	FLINT RIDGE S M	34-10-54	118-11-08		488	1977		467.4	1977					
3910-00	HENNINGER FLATS-LA CO MUR	34-11-38	118-05-17	01N/12W-5	777	1930	1979	1501.5	1978	244.7	1961	675.8	49	
5355-01	MARRHAM SADDLE	34-14-20	118-06-00		1615	1949	1969	1402.3	1966	279.7	1961	654.		

TABLE 8. PRECIPITATION STATIONS BY AREAL CODE (continued)

AREAL CODE	OWNER STATION NUMBER	STATION NAME	LATITUDE DEG MIN SEC	LONGITUDE DEG MIN SEC	TOWNSHIP & RANGE	ELEVATION	RECORD		MAXIMUM PRECIPITATION		MINIMUM PRECIPITATION		MEAN ANNUAL	YEARS OF RECORD
							YEAR BEGIN	YEAR END	MAX. ANNUAL	YEAR OCCUR	MIN. ANNUAL	YEAR OCCUR		
U-05-C1	6719-01	PASADENA GLEN - WEIDEN	34-10-50	118-03-00	01N/12W-5	419	1930	1956	1144.3	1941	296.7	1948	607.0	26
	6720-93	PASADENA - MORRIS	34-10-04	118-07-37	01N/12W-5	302	1943	1944	870.0	1943	721.1	1944	795.6	2
	6721-20	PASADENA-OMIO-EUCLID-PWD	34-07-45	118-08-28	01N/12W-5	230	1937	1944	1125.6	1941	407.3	1940	661.7	8
	6722-60	PASADENA-WASHINGTON-PALM	34-10-08	118-08-12	01N/12W-5	305	1936	1948	1154.9	1941	264.1	1948	609.5	13
	7589-11	RUBIO DEBRIS DAM	34-11-57	118-07-22		504	1965	1977	845.3	1966	398.5	1977	576.4	6
	7862-41	SAN MARINO-COOPER	34-07-00	118-07-59		185	1940	1959	1092.8	1941	213.7	1959	483.7	20
	7862-46	SAN MARINO-HUNTINGTON	34-07-41	118-06-40		204	1930	1974	1085.9	1941	157.2	1961	465.3	39
	7898-35	SANTA ANITA RESERVOIR	34-11-08	118-06-16		367	1976	1979	1059.3	1978	305.5	1976	570.7	3
	8210-50	SIERRA MADRE-LARAMIDA PK C	34-08-56	118-05-42	01N/12W-5	226	1937	1955	1158.4	1941	273.9	1948	585.4	18
	0140-01	ALTA CANYON	34-13-40	118-12-42		616	1967	1969	1246.7	1969	529.0	1968	881.8	3
U-05-C2	0140-60	ALTA CANYON-LA CANADA	34-13-15	118-12-52	02N/13W-5	538	1930	1933	439.5	1931	384.0	1930	411.8	2
	0208-11	ANGELES CREST 6 S	34-14-05	118-11-00		701	1946	1969	1423.9	1969	259.0	1961	643.2	23
	0208-12	ANGELES CREST HWY	34-15-30	118-11-45		853	1946	1979	1496.3	1969	242.8	1961	640.8	33
	0327-00	ARROYO SECO R S	34-12-33	118-10-12	02N/12W-5	372	1934	1974	1317.6	1941	221.1	1961	574.4	39
	0798-00	BIG TUJUNGA DAM	34-17-31	118-11-15	02N/13W-5	706	1917	1980	1540.1	1969	251.7	1960	676.5	53
	1090-11	BRIGGS TERRACE-SIEMS	34-14-17	118-13-27	02N/13W-5	678	1934	1979	1440.9	1969	291.8	1960	676.6	45
	1115-20	BROWN MTN ABOVE ALTADENA	34-14-07	118-07-51	02N/12W-5	1274	1943	1945	1066.9	1943	594.9	1945	814.2	3
	1798-11	CLEAR CREEK SCHOOL	34-16-40	118-10-15		975	1926	1979	1856.4	1978	267.4	1951	755.6	50
	1799-10	CLEAR CREEK R S	34-16-15	118-09-11		1105	1965	1977	1213.3	1967	508.1	1977	777.8	6
	1987-01	COON CANYON 1	34-12-56	118-10-10		462	1949	1962	1012.7	1952	198.4	1961	458.3	14
U-05-C3	1987-02	COON CANYON 2	34-13-00	118-09-58		556	1949	1978	1217.1	1978	208.0	1961	520.3	30
	1987-03	COON CANYON 3	34-13-03	118-10-09		520	1949	1962	1063.2	1952	233.3	1961	487.3	14
	1987-04	COON CANYON 4	34-13-09	118-09-51		616	1949	1962	1022.4	1952	226.9	1961	468.2	14
	1987-05	COON CANYON 5	34-13-18	118-09-50		673	1949	1979	1095.7	1978	193.9	1961	499.6	31
	1987-06	COON CANYON 6	34-12-45	118-10-14		386	1949	1978	1255.0	1978	215.8	1961	515.1	30
	1987-10	COON CANYON 7	34-13-32	118-09-19		709	1977		447.7	1977				
	2304-11	DAWN MINE	34-13-30	118-07-50		853	1946	1969	1310.7	1967	245.2	1961	618.7	23
	2404-00	DESCANSO GARDENS	34-12-10	118-12-40		396	1965	1974	1121.7	1969	501.4	1968	730.1	5
	2409-00	DEVILS GATE DAM	34-11-08	118-10-19		332	1940	1979	1153.9	1941	193.5	1961	512.3	39
	2780-01	EL PRIETO CANYON	34-13-17	118-09-19		46	1949	1978	1276.8	1978	236.2	1961	559.4	30
U-05-C4	2950-00	FAIR OAKS DEB BN-ALTADENA	34-12-15	118-08-18	01N/12W-5	483	1939	1979	1681.6	1969	221.5	1961	581.2	40
	3515-50	GOULD-SCE SUBST-LA CANADA	34-13-20	118-11-16	02N/13W-5	579	1939	1944	1280.4	1941	529.1	1940	821.2	5
	4621-01	LA CANADA	34-12-12	118-11-40		367	1930	1974	1291.9	1941	209.8	1961	563.5	40
	4621-11	LA CANADA ARROYO SECO	34-11-52	118-11-05		352	1930	1979	1315.2	1941	222.8	1961	541.5	49
	4621-60	LA CANADA-TON HALL	34-12-20	118-11-46	01N/13W-5	107	1934	1941	974.3	1938	508.1	1936	713.1	6
	4628-00	LA CRESCENTA-L.C.V.W.D.	34-13-16	118-14-13	02N/13W-5	477	1930	1980	1327.5	1978	244.7	1961	612.8	48
	4628-20	LA CRESCENTA GREGG	34-13-52	118-13-50		575	1965	1969	1246.2	1969	507.5	1968	851.6	3
	5155-11	LOWE OBSERVATORY	34-13-00	118-07-00	02N/12W-5	1042	1896	1919	1403.3	1916	266.1	1899	724.7	21
	5626-51	MILLARD SADDLE-ALTADENA	34-13-35	118-09-38	02N/12W-5	732	1943	1945	860.0	1943	427.9	1945	687.6	3
	5966-26	MT LOWE RIDGE	34-14-04	118-07-04	02N/12W-5	1463	1943	1945	797.9	1944	449.6	1945	623.8	2
U-05-C5	5967-21	MT LUKENS DISPOSAL SITE	34-14-05	118-11-47	02N/13W-5	991	1975		398.9	1975				
	6310-51	OAK GROVE	34-11-47	118-10-29		329	1945	1979	1142.1	1978	192.1	1961	515.3	28
	6355-11	OAKWIDE PHILLIPS	34-14-40	118-10-50		610	1930	1979	8309.6	1950	187.9	1960	860.4	49
	6719-03	PASADENA CHLORINE PLT	34-12-27	118-10-00		360	1935	1979	1309.4	1941	220.3	1961	569.5	44
	6720-90	PASADENA - HILLARD	34-12-17	118-10-01	01N/12W-5	404	1942	1946	968.0	1943	387.9	1942	599.8	5
	6855-35	PICKENS CANYON-TRUCK TRAIL	34-15-20	118-12-53	02N/13W-5	1242	1937	1942	1414.3	1943	518.7	1942	895.4	6
	6855-38	PICKENS DEBRIS BASIN	34-13-18	118-13-45		488	1976		482.8	1976				
	6891-08	PINE CANYON-TRUCK TRAIL	34-14-32	118-10-03	02N/12W-5	884	1943	1945	995.1	1943	562.3	1945	764.6	3
	8680-04	SUNSET R S	34-12-53	118-08-48		643	1939	1979	1277.4	1941	185.0	1961	569.1	36
	9464-01	WATERMAN G S	34-15-58	118-08-37		1003	1928	1975	1460.4	1941	273.5	1961	693.1	44
U-05-C6	0431-01	BAILEY DEBRIS DAM	34-10-25	118-03-38		360	1930	1977	1276.7	1941	201.2	1961	574.3	43
	0785-01	BIG SANTA ANITA DAM	34-11-03	118-01-09	01N/11W-5	427	1928	1979	1577.4	1969	217.9	1961	630.5	46
	0785-02	BIG SANTA ANITA R S	34-11-46	118-01-20		663	1953	1979	1757.3	1969	287.4	1961	719.5	27
	0785-13	BIG SANTA ANITA GUARD STA	34-11-28	118-01-05	01N/11W-5	594	1920	1938	1456.2	1922	464.1	1933	854.0	12
	4017-00	MOEGES FC 60A	34-12-30	118-02-00	02N/11W-5	608	1925	1979	2045.7	1978	346.9	1961	946.7	52
	6003-00	MOUNT WILSON-OBSERVATORY	34-13-32	118-03-21	02N/11W-5	1730	1905	1977	2071.1	1969	311.3	1942	847.2	73
	6003-05	MT WILSON OBSERVATORY	34-13-17	118-03-32		1722	1973	1975	989.3	1973	717.2	1975	853.3	2
	6006-00	MOUNT WILSON-AIRWAYS	34-13-36	118-03-57	02N/11W-5	1740	1940	1980	2023.7	1978	304.4	1961	881.7	39
	6155-01	NEWCOMB PASS	34-13-30	118-01-33		1268	1946	1977	1588.9	1967	328.4	1961	796.7	25
	9465-30	ORCHARD CAMP-MT WILSON TR	34-11-55	118-03-06	01N/11W-5	914	1929	1937	1290.3	1937	839.7	1936	1065.0	2
U-05-C7	6719-06	PASADENA-GLEN	34-10-54	118-04-42		427	1940	1959	1216.9	1941	304.5	1959	575.4	18
	7491-15	ROBERTS CAMP-SIERRA MADRE	34-11-56	118-01-10	01N/11W-5	564	1930	1932	850.4	1932	629.4	1931	773.8	3
	7897-00	SANTA ANITA FERN LGE	34-12-30	118-01-00	01N/11W-5	620	1938	1977	1506.7	1941	258.6	1961	754.4	37
	7898-20	SANTA ANITA CM HELIPT	34-12-52	118-01-05		785	1965	1977	1295.5	1967	536.0	1968	831.5	6
	7898-25	SANTA ANITA CYN CHANTRY	34-11-45	118-01-20		663	1974	1977	651.3	1975	478.6	1977	564.0	2
	7898-80	SANTA ANITA ABO WINTER CR	34-12-09	118-01-03	01N/11W-5	556	1930	1953	1317.5	1952	368.8	1951	709.5	4
	8210-00	SIERRA MADRE JM-MC KINNEY	34-10-18	118-03-33	01N/11W-5	351	1897	1958	1263.9	1941	245.1	1899	616.2	56
	8210-01	SIERRA MADRE DAM	34-10-34	118-02-32		335	1930	1979	1371.5	1978	222.3	1961	613.6	48
	8210-06	SIERRA MADRE	34-10-11	118-02-51		300	1931	1979	1123.5	1978	216.4	1961	599.7	46
	8210-07	SIERRA MADRE-PEGLER RANCH	34-09-27	118-02-36	01N/11W-5	201	1930	1979	1154.1	1978	176.8	1961	540.3	48
U-05-C8	8210-20	SIERRA MADRE-CLARKS HALF	34-10-48	118-01-30	01N/11W-5	488	1928	1945	1229.2	1941	346.5	1928	654.6	17
	8211-00	SIERRA MADRE PUMP STA	34-09-47	118-02-21		213	1930	1979	1197.6	1978	183.6	1961	545.1	47
	8211-11	SIERRA MADRE USFS												

TABLE 8. PRECIPITATION STATIONS BY AREAL CODE (continued)

AREAL CODE	DWR STATION NUMBER	STATION NAME	LATITUDE DEG° MIN' SEC"	LONGITUDE DEG° MIN' SEC"	TOWNSHIP & RANGE	ELEVATION	RECORD		MAXIMUM PRECIPITATION		MINIMUM PRECIPITATION		MEAN ANNUAL	NO. OF DAYS
							YEAR BEGIN	YEAR END	MAX ANNUAL	YEAR OCCUR	MIN ANNUAL	YEAR OCCUR		
U-09.01	0410-02	AZUSA VALLEY WATER CO	34-06-38	117-52-50	01S/10W-5	189	1930	1979	1036.2	1978	218.2	1951	434.4	42
	0410-03	AZUSA - MIBSCH	34-08-02	117-54-14	01N/10W-5	183	1930	1961	974.7	1941	180.1	1961	477.7	31
	0410-30	AZUSA-GRIFFITH (AZUSA 1)	34-06-24	117-53-58	01S/10W-5	166	1977		363.2	1977				
	0455-00	BALDWIN PARK	34-05-36	117-57-40	01S/10W-5	118	1933	1979	934.0	1978	142.0	1961	438.5	46
	0455-30	BALDWIN PARK NO. 1-LEACH	34-05-08	117-57-39	01S/10W-5	115	1930	1947	908.2	1941	272.6	1933	473.9	18
	0536-01	BASSETT-CLIFFORD	34-03-09	118-00-04		89	1930	1962	926.9	1941	124.2	1961	389.8	31
	0758-01	BIG DALTON-HOMRUE	34-10-34	117-48-26		541	1945	1966	1110.3	1958	328.9	1951	569.4	20
	0758-50	BIG DALTON SPREADING GROD	34-09-27	117-49-48		358	1940	1944	1147.0	1941	413.1	1942	729.2	5
	1665-10	CHARTER OAKS-HAYO	34-06-26	117-51-17	01S/09W-5	223	1930	1958	931.1	1941	296.5	1948	498.0	29
	2088-20	COVINA-BURCH	34-05-48	117-54-04	01S/10W-5	159	1944	1953	683.3	1952	242.8	1948	383.5	10
	2088-30	COVINA 3-EVANS	34-05-11	117-52-53	01S/10W-5	171	1930	1936	975.8	1935	292.7	1933	427.9	6
	2089-15	COVINA SEWAGE PLANT	34-05-02	117-53-57		155	1935	1979	957.6	1978	144.5	1961	412.2	39
	2089-30	COVINA-MATTHEWS	34-04-55	117-53-17	01S/10W-5	161	1930	1942	933.0	1941	278.2	1933	485.5	13
	2089-60	COVINA-THORPE	34-03-39	117-52-38	01S/10W-5	192	1930	1953	827.7	1941	229.4	1951	437.8	21
	2090-00	COVINA TEMPLE FC 193	34-04-57	117-52-28	01S/10W-5	175	1930	1980	1058.4	1978	151.0	1961	441.9	50
	2523-03	DUARTE-MADDOCKS	34-09-01	117-56-47		230	1943	1960	1075.8	1943	267.4	1948	511.0	18
	2523-30	DUARTE-MONROVIA CITRUS FR	34-07-58	117-58-43	01N/11W-5	140	1932	1948	975.6	1941	281.2	1948	543.4	16
	2778-10	EL MONTE AIRPORT	34-05-07	118-01-52		92	1977		355.7	1977				
	2779-01	EL MONTE FIRE STA	34-04-30	118-02-30		84	1930	1979	940.2	1941	144.7	1961	418.3	48
	2833-10	ENCINITAS SERVICE	34-09-25	117-50-48		91	1966	1975	332.1	1966	124.2	1972	245.5	9
	2835-50	ENGLEWOOD DEBRIS BASIN	34-09-25	117-50-48		399	1973	1976	640.6	1973	358.4	1976	461.2	3
	3452-00	GLENDOORA VEST FC 185	34-08-23	117-51-33		251	1883	1980	1556.1	1884	184.8	1899	558.8	98
	3452-01	GLENDOORA-BROWN	34-08-58	117-52-01		273	1935	1966	1058.3	1941	221.1	1961	523.0	31
	3452-02	GLENDOORA-ENGLEWOOD RCH	34-09-22	117-50-57		355	1930	1979	1297.5	1978	245.9	1961	566.2	48
	3452-03	GLENDOORA-MCICO	34-08-22	117-51-54		238	1930	1979	1271.4	1978	187.7	1961	501.7	49
	3452-04	GLENDOORA-WARREN	34-07-57	117-49-09		293	1930	1979	1156.0	1978	152.4	1961	497.6	48
	3452-22	GLENDOORA-MCIC-FOOTART P	34-07-23	117-47-36	01N/09W-5	324	1931	1940	745.8	1937	291.6	1933	518.1	8
	3452-30	GLENDOORA-GORDON RANCH	34-08-10	117-50-05	01N/09W-5	268	1941	1946	1024.4	1941	337.8	1942	639.9	5
	3452-60	GLENDOORA-WARREN-BOGGENHAM	34-08-51	117-52-53	01N/10W-5	264	1932	1943	1031.8	1941	359.1	1933	654.6	11
	3699-90	MACIENDA HEIGHTS	33-58-45	117-58-26		178	1973	1977	503.2	1973	307.4	1977	381.1	3
	3762-90	HAPPY VALLEY-JORDAN RANCH	33-59-15	117-58-21	02S/10W-5	150	1932	1937	723.3	1937	307.3	1933	551.7	3
	3795-50	HARROW DEBRIS BASIN	34-09-25	117-51-40		389	1973	1976	604.9	1973	341.9	1976	442.3	3
	4079-30	HOOK DEBRIS BASIN	34-09-15	117-52-35		381	1973	1976	658.9	1973	245.8	1976	430.7	3
	4777-11	LA PUENTE	34-01-00	117-55-15		140	1965	1976	780.8	1969	266.8	1976	469.9	6
	4839-11	LA VERNE-POLICE DEPT	34-06-03	117-46-12	01S/09W-5	320	1930	1977	894.8	1941	166.0	1961	445.0	44
	5099-01	LOADSBURG-SPRILLA VERNE L	34-06-00	117-46-00	01S/09W-5	320	1904	1919	739.0	1907	279.9	1913	534.0	14
	5781-00	MONROVIA	34-08-57	118-00-04		171	1930	1979	1064.9	1978	178.7	1961	522.8	37
	5781-01	MONROVIA-SPTS	34-09-58	117-59-37		293	1965	1977	1195.8	1969	396.3	1968	637.8	6
	5781-02	MONROVIA-GEARY	34-08-49	118-00-17		153	1946	1956	919.0	1952	282.8	1948	446.3	11
	5781-03	MONROVIA FALLS	34-11-09	117-59-14		549	1928	1950	1353.7	1943	369.7	1948	760.5	22
	5781-61	MONROVIA-OCNNOR	34-09-32	118-00-25	01N/11W-5	210	1930	1947	978.3	1941	363.0	1933	578.7	18
	5976-00	MT SAN ANTONIO COL	34-02-48	117-50-43		230	1930	1979	940.7	1978	147.6	1961	416.9	44
	6276-01	MO WHITTIER COLE RCH	34-00-26	117-59-42		175	1930	1963	934.8	1941	157.3	1961	435.6	32
	6276-41	NORTH WHITTIER HEIGHTS-SH	34-00-20	117-59-22	02S/11W-5	152	1935	1943	978.3	1941	335.0	1942	580.9	8
	6719-08	PASADENA-MURLBURT FS	34-07-48	118-09-12		238	1940	1979	1117.9	1941	177.1	1961	464.8	39
	7103-51	POTRERO HEIGHTS	34-02-35	118-04-50		87	1930	1979	938.0	1941	138.2	1961	410.7	49
	7161-02	PUENTE-FERRERO	34-00-12	117-56-19		116	1938	1967	935.3	1941	161.5	1961	417.0	37
	7161-06	PUENTE HILLS	33-59-40	117-59-27		262	1930	1979	1059.1	1978	149.6	1961	423.6	48
	7161-08	PUENTE-M WHITTIER	34-01-14	117-58-40		96	1939	1969	877.0	1969	137.2	1961	427.5	31
	7161-70	PUENTE - REINHARD	34-02-32	117-55-48	01S/10W-5	114	1952	1958	709.1	1952	293.2	1953	451.2	7
	7161-80	PUENTE-S.C.E.C.SUBSTATION	34-00-34	117-55-46	02S/10W-5	114	1930	1950	867.0	1941	243.0	1948	433.0	21
	7580-50	ROSEMEAD	34-04-53	118-03-55		93	1965	1977	600.9	1967	311.6	1976	427.0	6
	7748-31	SAN DIMAS 3	34-07-08	117-47-38	05W/09W-5	326	1930	1961	953.4	1941	173.8	1961	458.8	31
	7748-40	SAN DIMAS 4 - HARRIS	34-06-47	117-48-28	01S/09W-5	305	1930	1944	1034.2	1941	319.6	1933	573.4	13
	7748-80	SAN DIMAS - MOUNT	34-06-31	117-48-25	01S/09W-5	294	1930	1939	789.5	1937	297.2	1933	516.4	9
	7749-00	SAN DIMAS FC 95	34-06-26	117-48-19	01S/09W-5	291	1930	1980	1054.9	1978	152.2	1961	468.5	50
	7775-30	SAN GABRIEL BRUNGTION	34-06-18	118-06-32		144	1930	1979	1005.4	1941	156.8	1961	485.4	47
	7775-00	SAN GABRIEL CYN PM	34-09-20	117-54-28	01N/10W-5	227	1931	1980	1293.6	1978	216.6	1961	577.2	49
	7785-00	SAN GABRIEL FIRE DPT	34-06-11	118-05-56	01S/12W-5	137	1939	1980	1005.1	1978	155.8	1961	452.1	39
	7785-01	SAN GABRIEL SPRR	34-06-00	118-06-00	01S/12W-5	127	1930	1937	1150.6	1937	470.5	1933	721.7	8
	7785-80	SAN GABRIEL - WATTS	34-06-07	118-05-45	01S/12W-5	132	1930	1945	977.9	1941	320.3	1933	515.3	16
	7826-10	SAN JOSE HILLS GALSTE	34-02-48	117-54-17		168	1965	1974	699.7	1969	344.9	1968	475.4	5
	7926-00	SANTA FE DAM	34-07-04	117-58-24	01S/10W-5	130	1942	1979	932.9	1978	123.4	1961	391.8	38
	8022-14	SAWYIT DAM 2	34-10-34	117-59-14		420	1927	1979	1406.9	1978	234.8	1961	625.9	51
	8133-80	SHARPS FLAT-S GAB R-MORAN	34-11-28	117-51-45	01N/09W-5	305	1931	1933	825.3	1932	512.7	1931	669.0	2
	8130-20	SHORTCUT CYN W FORK	34-15-55	118-04-08		1349	1965	1977	1314.2	1967	647.7	1977	839.2	4
	8414-01	SOUTH PASADENA-CITY MALL	34-06-58	118-09-05	01S/12W-5	210	1930	1979	1067.1	1941	168.3	1961	460.7	49
	8414-50	SOUTH PASADENA-MARSH	34-06-10	118-08-34	01S/12W-5	170	1941	1947	1105.3	1941	386.4	1945	615.4	7
	8848-01	TEMPLE CITY	34-06-31	118-03-25		123	1942	1979	1160.8	1978	138.7	1961	419.4	33
	9218-11	VALENCIA	34-03-19	117-54-23		142	1930	1960	912.6	1941	197.8	1959	407.3	38
	9427-51	WALNUT FRUIT GROWERS	34-00-13	117-51-09		162	1932	1969	908.5	1941	143.1	1961	434.1	30
	9431-00	WALNUT PATROL STM	34-00-12	117-52-14	02S/09W-5	149	1930	1980	938.6	1941	125.9	1961	419.0	50
	9531-51	WEST ARCADIA	34-07-42	118-04-22		167	1930	1979	1087.6	1941	156.2	1961		

TABLE 8. PRECIPITATION STATIONS BY AREAL CODE (continued)

AREAL CODE	OWN STATION NUMBER	STATION NAME	LATITUDE N 0°-00' SEC	LONGITUDE W 0°-00' SEC	TOWNSHIP & RANGE	ELEVATION	RECORD		MAXIMUM PRECIPITATION		MINIMUM PRECIPITATION		MEAN ANNUAL	YEARS OF RECORD
							YEAR BEGN	YEAR END	MAX ANNUAL	YEAR OCCUR	MIN ANNUAL	YEAR OCCUR		
U-05.D3	1148-02	BUCKHORN FLAT	34-20-45	117-55-12		2030	1954	1978	2133.5	1978	84.4	1974	740.5	23
	1440-00	CAMP RINCON	34-14-20	117-51-36	02N/09W-5	466	1933	1977	1805.5	1969	275.1	1951	727.6	41
	1468-11	CAMP VALCREST	34-20-40	117-58-41		1798	1947	1977	1306.5	1969	189.1	1951	571.7	23
	1613-01	CEDAR SPRINGS-COM CAMP 37	34-21-21	117-52-34	03N/10W-5	2067	1936	1979	1687.6	1941	390.9	1951	804.8	39
	1724-01	CHILAO HRS	34-19-05	118-00-30		1608	1945	1979	1694.2	1978	229.0	1951	577.1	14
	1883-00	COGSWELL DAM	34-14-37	117-57-37	02N/10W-5	710	1933	1979	2125.7	1978	298.8	1951	846.6	44
	1897-50	COLORADO RANGER STATION	34-17-26	117-50-26	02N/09W-5	1000	1923	1979	1793.2	1978	328.8	1961	723.4	23
	1906-01	COLDWATER CANYON	34-15-49	117-42-38		1178	1944	1978	1674.0	1969	266.4	1972	694.9	32
	2198-00	CRYSTAL LAKE FC 283C	34-18-58	117-50-30	03N/09W-5	1637	1932	1980	2271.0	1978	410.6	1961	966.4	32
	2199-00	CRYSTAL LAKE FC 283B	34-19-38	117-50-12	03N/09W-5	1759	1932	1973	1708.0	1941	387.3	1951	940.6	29
	2445-50	DISAPPOINTMENT RIDGE-LACF	34-14-57	118-06-34	02N/12W-5	1676	1943	1945	705.9	1944	512.2	1945	609.1	2
	2479-10	DORR CANYON	34-22-16	117-46-51		2210	1965	1976	1228.4	1969	522.7	1975	778.9	8
	2662-80	EATON-MARKHAM SADDLE	34-14-31	118-05-38		1646	1976	1977	401.3	1976	359.9	1977	380.6	2
	2961-11	FALLING SPRINGS	34-18-06	117-50-16		1222	1929	1974	1892.9	1969	315.6	1951	807.9	41
	3068-20	FISH CANYON-BOHR-SLOAN	34-10-07	117-55-30	01N/10W-5	328	1930	1943	1238.5	1941	424.6	1933	735.1	12
	3069-10	FISH CANYON	34-12-29	117-56-43		792	1959	1977	872.3	1974	360.9	1961	612.1	13
	3686-20	GUFFY CAMP	34-20-20	117-38-57		2477	1965	1976	956.9	1967	413.8	1975	656.9	7
	4021-15	HOLIDAY HILL	34-21-25	117-40-50		2484	1965	1976	875.0	1969	345.4	1975	620.8	8
	5230-01	HOOVER OBERIS BAS	34-09-17	117-57-05		276	1965	1977	840.4	1967	308.0	1976	514.5	6
	5871-00	MORRIS DAM FC 3908	34-10-53	117-52-43	01N/10W-5	369	1935	1979	1416.3	1978	261.7	1961	652.0	44
	5956-01	MT ISLIP	34-20-50	117-49-57		2313	1950	1977	2409.8	1969	289.6	1951	1004.0	28
	5966-01	MT LOWE	34-13-35	118-06-34	02N/12W-5	1356	1940	1977	1682.4	1941	290.0	1961	750.2	27
	5966-15	MT LOWE FOX FARM	34-13-25	118-06-35	02N/12W-5	1372	1930	1937	1123.2	1935	521.8	1930	799.2	6
	6000-00	MT WATERMAN	34-19-00	117-55-00		2365	1974	1975	631.3	1974	567.1	1975	599.2	2
	6000-20	MT WATERMAN	34-20-23	117-56-21		2426	1950	1978	1729.8	1969	305.9	1961	701.3	23
	6250-01	NORTH FK GAGE STA-S GAB R	34-19-10	117-51-30	02N/09W-5	546	1934	1938	1115.4	1937	603.4	1936	820.5	4
	6465-00	OPIDIOS CAMP FC 378E	34-13-18	118-05-41	02N/12W-5	1295	1930	1979	2262.5	1969	353.4	1960	989.1	47
	6902-52	PINE MOUNTAIN	34-13-35	117-54-30		1250	1966	1969	1398.5	1967	594.4	1968	996.5	2
	7123-11	PRAIRIE FORKS	34-20-30	117-41-35		1731	1926	1975	1336.3	1969	327.1	1933	681.7	13
	7293-10	RED BOX-COM MAINT STA	34-13-43	118-06-43	02N/12W-5	1359	1938	1946	1741.6	1941	532.3	1942	924.5	8
	7293-20	RED BOX GAP	34-13-30	118-06-17		1410	1965	1977	1462.5	1967	609.4	1977	960.4	6
	7491-11	ROBERTA CANYON	34-13-30	117-55-15		1268	1965	1969	1936.0	1969	614.5	1968	1301.2	4
	7491-13	ROBERTS CANYON	34-13-30	117-55-15		1250	1947	1976	1976.0	1969	320.3	1951	812.9	29
	7530-03	ROGERS CANYON	34-09-48	117-54-06	01N/10W-5	241	1925	1969	1115.1	1941	231.9	1961	597.2	42
	7746-00	SAN DIMAS FERN CANYON	34-11-48	117-41-45		1585	1977		577.4	1977				
	7750-00	SAN DIMAS-TANBARK FLAT-RR	34-12-20	117-45-40	01N/08W-5	829	1948	1978	1526.1	1978	289.9	1951	588.0	11
	7775-45	SAN GABRIEL C E-K DOT	34-14-36	117-45-40		610	1954	1969	1144.5	1958	246.4	1961	571.4	14
	7775-50	SAN GABRIEL C E-K TUN	34-16-58	117-44-48		861	1966	1969	1399.5	1969	580.9	1968	946.4	3
	7775-51	SAN GABRIEL CYN EFK 2	34-14-10	117-48-18		488	1934	1979	1626.1	1969	57.5	1974	649.6	44
	7775-55	SAN GABRIEL CYN MELI	34-15-02	118-01-30		975	1965	1977	660.4	1976	563.4	1968	603.5	3
	7779-00	SAN GABRIEL DAM	34-12-19	117-51-38	01N/09W-5	451	1938	1980	1586.4	1978	294.0	1961	710.5	41
	7779-01	SAN GABRIEL DAM CAMP	34-13-31	117-50-48		457	1930	1969	6618.4	1952	286.0	1961	836.2	40
7779-25	SAN GABRIEL DAM-LAKE PANZ	34-12-21	117-51-38	01N/09W-5	451	1973		920.7	1973					
7783-30	SAN GABRIEL E FK-H CAMP 4	34-14-10	117-45-50	02N/08W-5	610	1932	1975	1656.1	1969	285.5	1933	705.8	21	
7785-15	SAN GABRIEL NO FORK	34-15-43	117-50-40		678	1965	1969	1082.8	1966	496.4	1968	789.6	2	
7898-40	SANTA ANITA-SPRING CAMP	34-12-52	117-58-56	02N/11W-5	1419	1942	1978	2111.9	1969	354.6	1961	847.4	37	
8022-11	SANPIT CANYON-HOGBACK	34-10-50	117-58-18	01N/10W-5	541	1929	1979	1514.4	1941	294.8	1961	798.3	36	
8022-12	SANPIT CANYON DEER PEAK	34-11-38	117-57-52		831	1931	1978	1514.4	1941	294.8	1961	786.7	45	
8379-45	SOUTH HAWKINS	34-18-46	117-48-32		2347	1955	1977	1890.6	1969	333.2	1961	771.3	22	
9231-23	VALLEY FORGE LG-CAMP KOLE	34-15-10	118-04-20	02N/11W-5	1052	1923	1945	1657.4	1943	432.5	1924	918.3	16	
9346-01	VINCENT GULCH	34-22-26	117-45-05	02N/10W-5	2012	1953	1978	2301.2	1969	289.9	1961	803.3	23	
9417-70	WALKER RANCH	34-15-49	117-42-41		1207	1977		543.6	1977					
9464-23	WATERMAN RM	34-20-23	117-56-21		2416	1965	1969	1729.6	1969	616.2	1968	1051.7	3	
9538-20	WEST FORK R S	34-14-40	118-03-00		936	1946	1967	1919.7	1967	525.1	1948	946.3	10	
9554-50	WEST FK SAN GAB-PATTERSON	34-14-35	117-54-57	02N/10W-5	546	1931	1934	1103.0	1932	626.3	1931	787.5	4	
0758-00	BIG DALTON DAM	34-10-06	117-48-36	01N/09W-5	480	1930	1980	1425.4	1978	233.7	1931	641.8	49	
7746-02	SAN DIMAS CYN E FK	34-11-41	117-44-26		843	1945	1977	1228.6	1958	272.8	1961	572.7	30	
7748-01	SAN DIMAS DAM	34-09-10	117-46-17	01N/09W-5	411	1928	1979	1306.1	1978	224.1	1961	555.3	51	
7749-03	SAN DIMAS R S	34-10-03	117-46-02	01N/08W-5	453	1929	1969	1100.5	1958	245.2	1961	572.5	37	
8783-51	TANBARK FLATS-PSF-RES-SRG	34-12-20	117-45-40	01N/08W-5	838	1928	1979	1595.0	1969	257.6	1961	699.4	46	
9190-70	UPPER WOLFSKILL CANYON	34-10-13	117-43-16		1105	1977		555.8	1977					
9763-01	WOLFSKILL CYN-UPPER	34-10-13	117-43-16		1105	1965	1968	1384.0	1967	512.9	1968	916.5	3	
9763-30	WOLFSKILL FALLS-SAN DIMAS	34-10-25	117-44-45	01N/08W-5	732	1925	1937	881.8	1937	400.8	1928	646.3	10	
2089-03	COVINA GRIFFITH	34-04-10	117-50-47		297	1965	1977	725.6	1967	269.3	1976	443.9	7	
6594-00	PACIFIC COLD FC 356B	34-03-00	117-49-00		210	1944	1955	684.0	1952	211.8	1948	342.9	10	
9672-50	POMONA-ADANSON	34-03-58	117-46-21		254	1945	1969	832.5	1958	159.5	1961	394.4	25	
7050-00	POMONA	34-03-58	117-46-21	01S/08W-5	261	1913	1980	1007.1	1978	159.5	1961	458.1	64	
8436-00	SPADRA PACIFIC COLONY	34-02-30	117-48-36	01S/09W-5	207	1932	1979	881.3	1978	140.6	1961	402.5	47	
1777-03	CLAREMONT SLAUGHTER	34-07-35	117-43-55		411	1945	1978	1067.4	1978	208.5	1959	445.9	32	
1777-30	CLAREMONT-BERNARD	34-07-16	117-43-02	01S/08W-5	424	1930	1933	448.6	1931	367.3	1933	409.1	3	
4839-00	LA VERNE-MATHWAY	34-05-47	117-46-16	01S/09W-5	316	1930	1940	712.4	1937	260.2	1933	444.5	10	
4840-30	LA VERNE HEIGHTS	34-06-57	117-45-04	01S/09W-5	376	1963	1979	1076.4	1978	253.1	1972	486.7	15	
5894-42	MOUNTAIN SPRINGS	34-05-43	117-46-30		427	1935	1946	981.8	1941	436.8	1940	672.0	7	

TABLE 8. PRECIPITATION STATIONS BY AREAL CODE (continued)

AREAL CODE	DWR STATION NUMBER	STATION NAME	LATITUDE DEG° MIN' SEC"	LONGITUDE DEG° MIN' SEC"	TOWNSHIP & RANGE	ELEVATION	RECORD		MAXIMUM PRECIPITATION		MINIMUM PRECIPITATION		MEAN ANNUAL	NO. OF YEARS
							YEAR BEGN	YEAR END	MAX. ANNUAL	YEAR OCCUR	MIN. ANNUAL	YEAR OCCUR		
U-05.F1	1917-00	CARBON CANYON DAM	33-55-00	117-50-00	035/09W-5	123	1973	1977	429.0	1973	227.8	1976	334.3	4
	2250-20	CYPRESS-LOVEY	33-49-50	118-02-22	045/11W-5	12	1953	1962	517.6	1958	46.0	1961	265.6	10
	3266-00	FULLERTON HILLCRST RE	33-52-00	117-54-13		104	1933	1976	919.3	1941	110.0	1961	346.8	44
	3266-01	FULLERTON-KNOWITON	33-52-20	117-53-45	035/10W-5	50	1919	1977	960.7	1941	110.6	1961	354.4	58
	3289-02	FULLERTON PUMP PLANT	33-50-52	117-55-34	045/10W-5	46	1932	1976	808.5	1941	61.2	1961	326.3	47
	3289-03	FULLERTON A P	33-52-23	117-58-24	035/10W-5	29	1935	1976	811.2	1978	100.7	1961	332.1	43
	3289-20	FULLERTON OCPCO YARD	33-52-05	117-54-38	035/10W-5	50	1960	1969	592.6	1969	84.8	1961	308.4	10
	9106-01	LOS ALAMITOS	33-48-35	118-04-35	045/11W-5	8	1911	1977	508.2	1969	91.1	1961	268.2	69
	5106-20	LOS ALAMITOS RB AUT	33-45-24	118-05-48	055/12W-5	2	1959	1980	543.1	1978	78.9	1961	245.7	21
	6959-01	PLACENTIA AUM CO	33-51-32	117-53-06	045/10W-5	58	1930	1969	907.5	1941	98.6	1961	327.9	36
U-05.F2	6959-02	PLACENTIA NUT ORANGE	33-52-24	117-52-24	035/10W-5	69	1928	1976	995.9	1941	114.9	1961	367.6	51
	0355-00	ASSOC OIL ANAHEIM 1	33-54-00	117-53-00	035/10W-5	104	1960	1966	398.6	1962	112.1	1961	246.2	4
	0509-00	BARNESON PARK	33-56-00	117-51-00		175	1960	1966	481.6	1962	155.9	1961	322.2	3
	1057-00	BREA DAM	33-53-26	117-55-36	035/10W-5	84	1960	1978	819.3	1978	177.5	1972	342.4	9
	1057-01	BREA UNION OIL	33-55-46	117-56-53		114	1965	1966	338.8	1966				
	2432-00	DIAMOND BAR MORSE CP	33-58-41	117-49-58	025/09W-5	228	1931	1979	944.6	1941	137.9	1961	398.8	44
	2432-01	DIAMOND BAR RCH 1	33-58-09	117-50-40		219	1930	1959	942.5	1941	189.2	1959	459.0	27
	3279-00	FULLERTON ARROQUES RCH	33-54-00	117-55-00	035/10W-5	101	1960	1965	262.1	1963	118.6	1961	190.4	2
	4659-11	LA HABRA	33-55-56	117-57-18	035/10W-5	96	1965	1969	718.4	1969	286.3	1968	461.2	3
	4659-15	LA HABRA FIRE STA	33-55-53	117-57-17		96	1976	1977	296.6	1977	252.8	1976	274.7	2
U-05.F3	4659-21	LA HABRA HEIGHTS	33-55-44	117-56-48	035/10W-5	91	1926	1956	803.9	1941	165.4	1948	362.7	31
	4659-31	LA HABRA RTS HW CO	33-56-55	117-57-31		136	1965	1977	693.7	1969	272.8	1976	398.9	6
	6473-00	ORANGE COUNTY RES	33-56-07	117-52-58	035/10W-5	201	1948	1976	687.3	1969	108.5	1961	307.2	29
	7161-03	PUEBLO HILLS-WEISEL	33-57-15	117-59-20		221	1930	1979	912.1	1978	129.1	1961	405.2	49
	8119-00	SHAFER TOOL WKS	33-55-00	117-54-00		110	1941	1957	682.5	1952	203.8	1949	347.7	15
	8158-00	SHELL ABSORPTION PLT	33-57-00	117-54-00		207	1957	1966	719.5	1958	139.2	1961	356.0	6
	0373-50	ATWOOD - OCVO	33-51-33	117-49-04	045/09W-5	79	1964	1978	862.0	1978	191.8	1972	357.5	15
	1518-00	CARBON CANYON GILMAN	33-56-00	117-47-00	035/09W-5	495	1966	1978	361.3	1974	213.0	1972	271.0	4
	1520-00	CARBON CANYON WORKMAN	33-57-00	117-48-00	025/09W-5	358	1967	1978	861.6	1978	195.6	1972	413.4	12
	3285-00	FULLERTON DAM	33-54-00	117-53-00	035/10W-5	104	1960	1978	640.1	1969	182.7	1972	326.9	9
U-06.00	4620-00	LA BREA CANY MUNT	33-57-00	117-50-00		213	1942	1956	735.5	1952	234.0	1948	400.3	13
	4639-56	LA VIOA SPRINGS	33-59-53	117-47-43		204	1931	1962	1022.9	1941	136.9	1961	421.9	30
	6432-00	OLINDA	33-55-00	117-51-00	035/09W-5	149	1941	1966	683.4	1958	124.2	1961	318.4	23
	9138-00	UNION OIL STEARNS	33-56-00	117-52-00	035/09W-5	216	1941	1969	685.8	1958	133.4	1961	336.7	22
	9847-00	YORBA LINDA	33-54-00	117-49-00	035/09W-5	123	1913	1980	709.7	1958	118.9	1961	359.6	60
	9847-21	YORBA RESERVOIR	33-52-19	117-48-37	035/09W-5	98	1926	1976	602.5	1978	117.7	1961	356.5	31
	7870-00	SAN NICOLAS ISLAND-AIRSTA	33-14-00	119-27-00		133	1948	1976	199.0	1975	55.0	1949	149.8	10
	7871-00	SAN NICOLAS ISLAND-USM	33-15-00	119-30-00		41	1933	1945	548.5	1941	135.3	1934	277.5	11
	0395-00	AVALON PLEASURE PIER	33-21-00	118-20-00		8	1910	1980	756.0	1978	124.5	1924	320.2	33
	7910-00	SANTA CATALINA WB AP	33-24-00	118-25-00		479	1963	1968	328.9	1967	151.1	1964	240.0	2
U-06.01	2801-00	EL SERENO	34-04-49	118-10-51		160	1935	1961	943.5	1941	159.4	1961	419.4	26

TABLE 8. PRECIPITATION STATIONS BY AREAL CODE (continued)

AREAL CODE	OWN STATION NUMBER	STATION NAME	LATITUDE	LONGITUDE	TOWNSHIP & RANGE	ELEVATION	RECORD		MAXIMUM PRECIPITATION		MINIMUM PRECIPITATION		MEAN ANNUAL	YEARS OF RECORD
							YEAR BEGN	YEAR END	MAX ANNUAL	YEAR OCCUR	MIN ANNUAL	YEAR OCCUR		
Y-01-A1	7813-30	SAM JACINTO CDF FS SR6	33-40-52	117-57-30	04S/01W-S	475	1941	1975	603.4	1941	117.1	1961	300.5	21
	7888-01	SANTA ANA CDFC	33-43-05	117-52-11	05S/10W-S	38	1909	1978	816.4	1941	90.7	1961	332.0	70
	7893-00	SANTA ANA-SCUDDER	33-43-07	117-53-22	05S/10W-S	30	1954	1978	700.7	1978	89.7	1961	293.4	25
	8060-01	SEAL BEACH-LAMP POWER PL	33-44-42	118-06-43	05S/12W-S	36	1928	1966	674.0	1941	83.0	1961	280.4	38
	8499-01	STANTON	33-48-35	118-00-06	04S/11W-S	17	1927	1964	818.6	1941	82.3	1961	311.0	35
	9086-10	TUSTIN - AUTOMATIC	33-44-53	117-48-38	03S/09W-S	40	1958	1973	557.9	1958	90.1	1961	271.8	16
	9087-00	TUSTIN IRVINE RANCH	33-43-52	117-46-54	03S/09W-S	36	1877	1980	829.3	1884	106.5	1961	323.6	103
	9087-01	TUSTIN HIGH	33-44-12	117-49-06	03S/09W-S	37	1926	1963	802.0	1941	87.1	1961	317.7	38
	9338-01	VILLA PARK-ALLEN	33-48-27	117-49-32	04S/09W-S	87	1919	1959	877.9	1941	140.6	1959	363.8	41
	9338-09	VILLA PARK-ORCHARD	33-48-47	117-49-20	04S/09W-S	91	1965	1969	318.7	1966	218.3	1968	268.5	2
	9569-11	WESTMINSTER	33-43-08	117-59-17	03S/11W-S	12	1936	1978	700.5	1978	75.8	1961	293.7	22
	9748-04	WINTERSBURG-SLATER	33-42-47	117-59-54	05S/11W-S	8	1928	1970	655.1	1941	87.7	1961	287.5	42
Y-01-A2	4173-11	MUMFINGTON BEACH	33-39-50	117-59-48	06S/11W-S	12	1929	1977	749.9	1941	89.7	1961	282.3	49
	4300-07	IRVINE CO LIMESTONE	33-43-27	117-42-03	05S/08W-S	261	1918	1978	955.6	1978	167.9	1959	418.2	59
	4300-69	IRVINE PETERS CANYON	33-46-40	117-43-30	03S/08W-S	168	1900	1945						
	5822-00	MODJESKA-MC ARTHUR	33-42-28	117-37-39	05S/07W-S	396	1964	1977	1153.2	1969	312.8	1972	522.3	13
	6472-10	ORANGE-ARMOUR	33-46-58	117-51-03		61	1897	1933	528.7	1915	124.0	1898	328.5	37
	7987-00	SANTIAGO DAM	33-47-00	117-43-20		262	1948	1978	688.3	1958	139.0	1961	319.8	22
	7987-08	SANTIAGO CANYON PLEASANT	33-43-45	117-38-53	05S/07W-S	348	1895	1933	755.9	1895	198.4	1899	458.2	39
	8243-00	SILVERADO R S	33-45-10	117-40-00	05S/07W-S	335	1946	1978	960.2	1969	226.8	1951	447.2	10
	8243-01	SILVERADO - FELDER	33-44-45	117-36-02	05S/07W-S	488	1956	1970	1322.7	1969	231.2	1961	599.4	13
	8243-20	SILVERADO CANYON	33-44-48	117-34-56	05S/07W-S	610	1931	1962	1243.4	1941	291.5	1959	650.5	32
	9338-03	VILLA PARK DAM	33-48-53	117-46-00	04S/09W-S	174	1962	1978	839.8	1978	190.7	1972	349.1	17
	1140-08	BRYANT RANCH	33-52-32	117-42-28	03S/10W-S	130	1965	1978	910.3	1978	216.5	1972	396.1	12
Y-01-A3	1520-01	CARBON CANYON SUMMIT	33-57-58	117-45-40	02S/08W-S	366	1931	1961	1014.8	1941	150.8	1961	418.0	31
	3611-55	GREEN RIVER GOLF	33-52-25	117-40-15	03S/08W-S	137	1970	1978	732.8	1978	223.5	1977	362.8	7
	0145-59	ALTA LOMA-ROBEROS	34-07-20	117-39-05	01W/07W-S	422	1975	1976	356.9	1975	295.1	1976	326.0	2
	0887-00	BLOOMINGTON	34-04-08	117-23-49	01S/05W-S	335	1965	1969	684.0	1969	310.2	1968	472.1	4
Y-01-B1	1597-31	CASA COLINA GRIMMETT	33-59-30	117-43-16	02S/08W-S	219	1965							
	1732-01	CHINO-AMERICAN BEET SUG P	34-00-35	117-41-14	02S/08W-S	219	1941	1951	935.5	1941	200.5	1948	380.7	11
	1732-02	CHINO IMBACH	33-58-30	117-39-38	02S/07W-S	196	1965	1976	612.1	1969	211.2	1976	371.7	5
	1732-03	CHINO SCE CO	33-59-52	117-40-50	02S/08W-S	206	1965	1976	331.6	1966	319.5	1975	325.6	2
	1732-04	CHINO SPRR	34-01-00	117-41-00	02S/08W-S	0	1893	1915	668.5	1907	159.6	1899	398.7	22
	1732-07	CHINO FIRE NO 1	34-01-00	117-41-56	02S/08W-S	223	1967	1975	669.0	1969	330.4	1975	499.7	2
	1732-08	CHINO FIRE STATION-2	34-00-00	117-42-58	02S/08W-S	200	1965	1977	420.6	1968	227.4	1976	339.1	5
	1732-40	CHINO COUNTY YARD	34-01-15	117-41-15	02S/08W-S	222	1976		261.1	1976				
	1777-01	CLAREMONT FIRE STA	34-03-45	117-42-57	01S/08W-S	360	1930	1979	1082.3	1978	161.6	1961	452.7	50
	1779-00	CLAREMONT POMONA COL	34-05-48	117-42-33	01S/08W-S	366	1891	1980	1006.4	1978	158.7	1961	454.7	89
	1941-01	COLTON HWY YARDS	34-04-10	117-20-32	01S/04W-S	311	1965	1969	755.0	1969	300.4	1968	491.5	4
	2210-02	CUCAMONGA 1-USWB	34-06-00	117-39-00			1968	1969	778.1	1969	331.0	1968	554.6	2
	2210-05	CUCAMONGA-CO WATER DIST	34-06-28	117-39-30	01S/07W-S	373	1966	1976	365.1	1975				
	2307-51	DAY CANYON	34-10-30	117-32-11	01W/06E-S	785	1965	1976	1461.5	1969	368.3	1966	787.2	3
	2325-51	DECLER-FONTANA FIRE STA 2	34-04-40	117-28-14	01S/06W-S	340	1965	1969	763.1	1969	324.5	1968	488.9	3
2329-40	DEER CREEK DAM	34-10-45	117-34-00	01W/07W-S	872	1976		198.1	1976					
Y-01-B2	2895-00	ETIWAHOA	34-07-31	117-31-30	01W/06W-S	424	1965	1978	959.7	1969	243.8	1972	485.2	13
	2895-15	ETIWAHOA-BARNES	34-08-11	117-30-57	01W/06W-S	427	1976							
	3117-01	FONTANA B + B	34-06-33	117-25-36	01S/05W-S	402	1915	1966	785.5	1922	320.3	1924	454.7	16
	3117-04	FONTANA UNION W.C.	34-05-00	117-26-04	01S/05W-S	390	1965	1976	409.7	1966	287.1	1976	355.7	4
	3117-35	FONTANA CO.YDS.	34-05-59	117-25-02	01S/05W-S	389	1965	1975	825.2	1969	334.5	1975	474.7	4
	3117-30	FONTANA HERALD NEWS	34-04-03	117-26-08	01S/05W-S	390	1976		288.6	1976				
	3120-30	FONTANA RAISER	34-04-40	117-30-20	01S/06W-S	332	1960	1980	807.8	1980	129.8	1961	383.4	16
	3438-20	GLEN AVON	34-00-43	117-29-37	02S/06W-S	227	1962	1978	578.7	1969	187.6	1970	286.2	15
	3682-51	GUASTI VINE	34-03-55	117-35-10	01S/07W-S	297	1976		339.2	1976				
	4300-24	IRVINE CO BAUDINO	33-58-56	117-42-37	06S/08W-S	107	1911	1976	729.2	1941	85.1	1961	315.5	65
	5706-01	MIRA LOMA SPACE CENTER	34-01-41	117-31-54	02S/06W-S	252	1967	1976	220.5	1976				
	5787-08	MONTCLAIR FIRE DEPT	34-03-41	117-41-16	01S/08W-S	294	1975	1977	394.6	1977	291.3	1976	352.8	3
	5790-51	MONT VISTA	34-03-41	117-41-17	01S/08W-S	296	1965	1969	746.6	1969	394.0	1968	537.5	4
	6457-02	ONTARIO FS	34-03-55	117-38-47	01S/07W-S	301	1965	1976	803.9	1969	270.1	1976	499.7	6
	6457-10	ONTARIO FS 3	34-02-24	117-37-12	01S/07W-S	262	1976		181.3	1976				
6457-20	ONTARIO SEWAGE PLANT 25	34-01-45	117-36-17	02S/07W-S	248	1965	1966	247.2	1966					
Y-01-B3	6457-25	ONTARIO SHERIFF DEPT	34-03-08	117-40-06	01S/08W-S	351	1966	1968	115.6	1968				
	6605-11	PADUA WILLS PS	34-08-54	117-41-52		552	1949	1979	1285.2	1978	229.5	1961	521.6	30
	6776-21	PEOLEY FIRE STA	33-58-31	117-29-07	02S/06W-S	186	1955	1978	543.5	1969	79.3	1961	258.4	23
	6889-31	PINE 2	33-56-46	117-28-25	03S/07W-S	175	1965	1969	750.5	1969	288.0	1968	464.3	4
	6891-12	PINE COVE CDF FIRE STA	33-45-40	116-44-12	05S/02E-S	1800	1968	1979	1324.2	1969	485.8	1977	774.7	10
	7050-01	POMONA FIRE STATION	34-03-17	117-43-02		257	1930	1979	884.9	1978	138.5	1961	404.9	49
	7050-12	POMONA-STEVENS	34-01-34	117-46-06		250	1930	1969	943.2	1941	136.5	1961	415.2	39
	7384-09	RIALTO ADAMS	34-05-19	117-22-59	01S/05W-S	358	1968	1969	864.7	1969	339.1	1968	601.9	2
	9017-50	TRES HERRANOS 2-HR CHINO	34-00-00	117-47-00	02S/09W-S	302	1931	1962	1041.7	1941	142.5	1961	428.6	29
	9157-00	UPLAND FC 6308	34-08-23	117-39-43	01W/08W-S	561	1931	1960	1078.8	1941	231.7	1959	553.1	28
	9150-01	UPLAND - CACUMH	34-07-08	117-46-49	01S/08W-S	460	1932	1979	1143.4	1978	191.7	1961	483.3	46
	9160-32	UPLAND CO YDS	34-05-43	117-37-42	01S/07W-S	370	1965	1969	738.3	1969	352.0	1968	498.4	3
	9160-12	UPLAND CHAPPEL	34-07-35	117-40-50	01W/38W-S	490	1965	1976	909.1	1969	327.4	1976	535.7	4
	9160-20	UPLAND FIRE STATION	33-05-55	117-38										

TABLE 8. PRECIPITATION STATIONS BY AREAL CODE (continued)

AREAL CODE	OWNER STATION NUMBER	STATION NAME	LATITUDE DEG MIN SEC	LONGITUDE DEG MIN SEC	TOWNSHIP & RANGE	ELEVATION	RECORD		MAXIMUM PRECIPITATION		MINIMUM PRECIPITATION		MEAN ANNUAL	YEARS OF RECORD
							YEAR BEGN	YEAR END	MAX ANNUAL	YEAR OCCUR	MIN ANNUAL	YEAR OCCUR		
Y-01.83	7712-08	SAN ANTONIO SP GROS	34-09-20	117-40-55		637	1939	1964	1041.4	1958	232.6	1961	515.2	26
	7714-70	SAN ANTONIO-USFS GUARD ST	34-10-44	117-40-27	01N/08W-5	725	1939	1942	1225.9	1941	455.0	1942	748.9	4
	8315-23	SNOW CREST CAMP-CAM BALDY	34-10-05	117-37-35	02N/07W-5	1981	1931	1934	1298.9	1932	572.3	1950	1022.3	5
	9001-30	TRAILS INN-ICE HOUSE CYN	34-14-45	117-36-51	02N/07W-5	1905	1936	1942	1668.3	1941	585.4	1940	885.9	4
Y-01.84	0145-05	ALTA LOMA FORNEY	34-07-25	117-36-27	01N/07W-5	568	1965	1976	1203.1	1969	368.1	1968	717.4	4
	7712-06	SAN ANTONIO MTS	34-09-25	117-39-03	01N/07W-5	579	1965	1976	1260.3	1969	416.3	1968	710.8	6
	9158-00	UPLAND IN LHS GROVES	34-07-58	117-38-27	01N/07W-5	489	1959	1980	1130.3	1978	186.8	1961	519.4	20
Y-01.85	1670-25	CHASE TAYLOR	33-50-37	117-34-32	04S/07N-5	322	1976		269.3	1976				
	2031-00	CORONA USNR COR FIRE DEPT	33-53-05	117-33-45	03S/07W-5	181	1909	1980	2632.9	1911	71.3	1961	352.9	72
	2031-35	CORONA FOOTHILL LEROM C 5	33-52-25	117-35-00	03S/07W-5	223	1943	1973	535.1	1943	149.4	1971	308.9	12
	2033-02	CORONA SOUTH BARNES VIA	33-50-15	117-33-32	04S/06W-5	326	1912	1978	836.0	1978	81.2	1961	331.3	67
	2033-03	CORONA CDF FIRE STATION	33-54-07	117-33-40	03S/07W-5	194	1951	1979	673.4	1978	79.5	1961	270.2	28
	2034-01	CORONA FIRE DEPARTMENT	33-52-40	117-33-40	03S/07W-5	183	1951	1979	684.5	1978	79.5	1961	273.1	27
	2034-21	CORONA LEROM CO 1	33-50-38	117-34-36		320	1930	1979	844.5	1979	124.0	1961	368.8	48
	2034-22	CORONA LEROM CO 2	33-49-51	117-34-41		373	1932	1974	1019.7	1969	112.4	1961	421.9	43
	2034-23	CORONA LEROM CO 3	33-51-50	117-35-30		259	1932	1973	845.3	1969	96.3	1961	364.3	41
	2034-60	CORONA-TERESCAL WATER CO	33-52-23	117-33-56	03S/07W-5	207	1906	1974	720.6	1969	107.3	1961	317.3	69
	5163-30	LOWER RANCH	33-51-40	117-35-37	03S/07W-5	262	1932	1973	845.3	1969	96.3	1961	364.3	41
	6215-11	NORCO FIRE DEPT	33-55-47	117-34-40	03S/06W-5	189	1924	1980	677.6	1978	63.8	1961	277.4	56
	6308-05	OAR FLAT	33-49-15	117-38-18	04S/07W-5	823	1972	1978	784.1	1973	337.9	1972	516.3	4
	7123-00	PRADO DAM RRNG	33-53-25	117-38-08	03S/07W-5	175	1940	1979	810.4	1978	135.1	1961	339.6	39
	7123-01	PRADO DAM	33-53-25	117-38-39	03S/07W-5	146	1965	1975	686.0	1969	264.2	1968	406.8	5
	8046-50	TERESCAL WATER CO	33-52-05	117-34-42	03S/07W-5	207	1906	1978	790.7	1978	107.3	1961	322.4	73
9163-25	UPPER DRIVE	33-50-02	117-34-45	04S/07W-5	381	1932	1979	1019.7	1969	112.4	1961	426.3	47	
Y-01.86	0264-00	ARLINGTON	33-55-01	117-26-31	03S/05W-5	245	1963	1979	531.9	1978	146.0	1971	245.5	15
	0264-01	ARLINGTON-MOCKINGBIRD RES	33-53-44	117-24-54	03S/05W-5	340	1965	1969	394.8	1969				
	3732-50	HARRISON DAM	33-52-14	117-26-04	03S/05W-5	389	1962	1978	343.9	1969	126.5	1964	202.0	16
	4814-11	LA SIERRA FIRE STATION	33-55-07	117-29-12	03S/06E-5	217	1956	1979	567.0	1978	67.6	1961	238.2	22
	5736-50	MOCKINGBIRD RES	33-53-44	117-24-54	03S/05W-5	340	1939	1978	563.9	1941	82.0	1961	233.1	39
	9774-20	WOODCREST PREMOA DAM	33-53-50	117-19-47	03S/05W-5	482	1956	1978	394.0	1969	74.6	1961	202.5	22
	9774-40	WOODCREST SDF	33-53-05	117-21-01	03S/05W-5	475	1976		262.8	1976				
	1941-03	COLTON SCE CO.	34-03-22	117-19-28	01S/04W-5	287	1965	1975	274.8	1975				
	2164-11	CRESTMORE	34-01-41	117-23-28	02S/05W-5	314	1943	1962	560.9	1952	98.1	1961	278.0	12
	3121-00	FONTANA 35 STP	34-02-31	117-27-50	01S/06W-5	293	1965	1976	472.0	1967	258.7	1976	328.7	5
Y-01.87	3951-09	HIGHGROVE CDF FIRE STA	34-00-55	117-19-48	02S/04W-5	288	1956	1978	501.5	1969	105.4	1961	262.7	22
	3951-11	HIGHGROVE STEAM PLANT SCE	34-01-25	117-19-45	02S/04W-5	288	1965	1976	412.6	1967	222.1	1975	296.0	5
	7469-01	RIVERSIDE RCFC WCD OFFICE	34-00-10	117-22-40	02S/05W-5	244	1881	1979	653.7	1884	63.8	1961	280.0	97
	7470-00	RIVERSIDE FIRE STM 3	33-57-04	117-23-15	02S/05W-5	256	1881	1980	653.7	1884	74.2	1961	273.1	97
	7473-00	RIVERSIDE CITRUS EXP	33-58-02	117-20-62	02S/04W-5	301	1925	1980	593.4	1941	82.4	1961	274.7	56
	7588-01	RUBIDOUX LAB USDA	33-58-48	117-23-48	02S/05W-5	255	1938	1978	609.4	1941	71.9	1961	254.3	40
	7588-02	RUBIDOUX FIRE DEPT.	33-59-56	117-24-16	02S/05W-5	237	1966	1978	566.7	1969	136.3	1972	279.0	10
	9587-01	WEST RIVERSIDE	34-00-44	117-26-48	02S/05W-5	276	1949	1978	575.4	1969	81.7	1961	270.4	29
	3458-11	GLEN IVY	33-45-54	117-29-10	05S/06W-5	335	1906	1978	1068.2	1969	107.5	1961	197.6	72
	2033-01	CORONA BARNES EAST 37	33-49-57	117-33-32	04S/07W-5	372	1942	1958	583.1	1952	190.0	1948	327.6	16
Y-01.88	2717-00	EL CERRITO-CDF FIRE STAT	33-49-29	117-30-33	04S/06W-5	244	1963	1979	655.9	1978	169.9	1970	290.8	15
	9675-51	WILD ROSE RANCH-EARL	33-47-25	117-29-54		267	1965							
	9675-55	WILD ROSE RCH CFL	33-47-00	117-30-04	04S/06W-5	308	1973	1976	373.6	1973	263.3	1974	324.1	4
	9675-55	WILD ROSE RANCH 57	33-47-07	117-30-05	04S/06W-5	335	1972	1979	798.0	1978	263.3	1974	385.4	6
	9675-70	WILD ROSE R OFFICE	33-47-45	117-29-58		283	1914	1979	867.4	1978	80.9	1961	338.1	47
	1260-51	CAJALCO 1	33-50-06	117-21-02	04S/05W-5	463	1936	1978	427.7	1969	151.1	1961	224.8	23
	1260-52	CAJALCO 2	33-50-27	117-21-31	04S/05W-5	466	1934	1964	565.9	1941	97.5	1959	238.2	29
	2598-50	EAGLE VALLEY	33-51-33	117-28-46	03S/06W-5	416	1964	1978	425.9	1969	149.4	1971	247.6	12
	4680-51	LAPE MATHEWS 1	33-50-33	117-26-47	04S/05W-5	424	1947	1975	419.2	1952	56.9	1961	188.3	29
	4680-52	LAPE MATHEWS 2	33-50-00	117-23-00	04S/05W-5	427	1945	1973	392.4	1952	65.6	1961	196.6	38
Y-01.89	4680-53	LAPE MATHEWS 3	33-50-48	117-25-16	04S/06W-5	963	1939	1976	543.0	1941	81.5	1961	229.9	39
	5437-01	MATHEWS DAM	33-51-07	117-25-47		427	1939	1978	543.0	1941	81.5	1961	229.6	39
	8063-00	SEAL HOUSE	33-50-00	117-25-00	04S/05W-5		1965	1966	233.0	1966				
	9554-75	WESTERN WMO	33-50-21	117-22-10	04S/05W-5	451	1971	1978	270.2	1976	136.1	1972	227.4	6
	7882-00	SANTA ANA FIRE STA	33-44-39	117-52-62		35	1889	1980	733.8	1978	99.0	1961	337.8	67
	2158-00	CREST FOREST C + C	34-14-10	117-32-17	02N/04W-5	1469	1965	1969	1766.6	1967	1268.1	1966	1517.4	2
	3461-00	GLENH RANCH-LITTLE CREEK	34-15-21	117-29-19	02N/06W-5	990	1900	1916	1357.0	1914	291.1	1900	866.1	17
	4491-20	KELLYS RAMP-ICEHOUSE CYN	34-13-50	117-36-22	02N/07W-5	2530	1911	1947	2197.4	1941	662.5	1934	1320.4	15
	5001-00	MT BALDY MCHN	34-16-29	117-36-35	02N/07W-5	2158	1954	1972	1413.7	1967	332.4	1961	755.1	15
	7711-01	SAN ANTONIO CANYON	34-16-25	117-36-50		2177	1965	1968	1365.1	1966	671.8	1968	1018.5	2
Y-01.90	7880-20	SAN SEVASTIAN LG	34-11-31	117-27-29	02N/06W-5	1594	1976		411.5	1976				
	5212-01	LITTLE CR SB 107	34-12-16	117-26-57	01N/05W-5	719	1976		643.9	1976				
	2895-30	ETIWANDA GAME ASSN	34-09-40	117-28-55	01N/06W-5	501	1976		445.0	1976				
	3118-00	FONTANA 5 W	34-10-57	117-26-32	01N/05W-5	601	1960	1980	1388.4	1980	228.6	1961	640.7	18
Y-01.91	1941-02	COLTON P.O.	34-04-00	117-19-23	01S/04W-5	249	1965	1976	441.3	1969	252.0	1968	331.7	5
	3117-06	FONTANA POWERHOUSE 2	34-09-20	117-23-48	01N/05W-5	444	1965	1976	341.5	1976				
	7384-00	RIALTO	34-09-54	117-22-24	01S/05W-5	372	1965	1976	813.6	1969	309.9	1975	446.3	6
	7384-30	RIALTO JAMES	34-07-44	117-22-01	01N/05W-5	424	1976		403.7	1976				
Y-01.92	5257-00	LOMA LINDA	34-02-48	117-15-39	01S/04W-5	361								

TABLE 8. PRECIPITATION STATIONS BY AREAL CODE (continued)

AREAL CODE	DWR STATION NUMBER	STATION NAME	LATITUDE DEG MIN SEC	LONGITUDE DEG MIN SEC	TOWNSHIP & RANGE	ELEVATION	RECORD		MAXIMUM PRECIPITATION		MINIMUM PRECIPITATION		MEAN ANNUAL	YEARS OF RECORD
							YEAR BEGN	YEAR END	MAX ANNUAL	YEAR OCCUR	MIN ANNUAL	YEAR OCCUR		
Y-01.E2	2407-33	DEVIL CANYON	34-13-48	117-20-02	01N/04W-5	579	1976		436.9	1976			619.0	4
	2412-00	DEVORE	34-14-03	117-24-24	02N/03W-5	742	1965	1976	800.0	1966	454.6	1968	873.3	2
	2412-01	DEVORE-CDF FIRE STATION	34-13-16	117-24-11	02N/03W-5	695	1965	1976	1437.4	1969	493.4	1968	873.3	2
	2618-02	EAST HIGHLAND GOLD	34-06-47	117-10-07	01S/03W-5	411	1968	1969	697.1	1969	133.6	1968	419.4	2
	2618-03	EAST HIGHLAND ORANGE	34-07-17	117-10-38	01N/03W-5	465	1965	1976	830.9	1969	247.7	1968	497.1	3
	3748-11	SAN BND HANFORD PLANT	34-06-09	117-17-28	01S/04W-5	314	1965	1969	700.9	1969	239.4	1968	441.5	3
	3953-20	HIGHLAND DUNDEE	34-07-28	117-12-58	01N/03W-5	367	1976		376.2	1976				
	5212-00	LYTLE CR FOOTMILL BLVD	34-06-30	117-19-53	01S/04W-5	361	1948	1977	731.5	1969	130.8	1951	290.8	10
	5212-02	LYTLE CREEK SB 198	34-07-26	117-20-53	01N/04W-5	373	1965	1976	834.8	1969	314.7	1976	527.0	3
	5218-00	LYTLE CREEK R S	34-13-50	117-28-25	02N/06W-5	841	1933	1940	8676.1	1980	49.8	1934	989.9	42
	6045-50	MUSCOTT AND RIALTO	34-06-04	117-19-23	01S/04W-5	335	1976		267.0	1976				
	6047-10	MUSCOTT FIRE DEPT	34-08-50	117-20-30	01N/04W-5	387	1965	1976	939.2	1969	306.7	1968	524.9	3
	6172-10	SAN BND NEWMARK SBVND	34-10-23	117-18-45	01N/04W-5	433	1976		378.8	1976				
	6172-31	SAN BND NEWMARK SBVND	34-10-19	117-18-45	01N/04W-5	431	1965	1976	986.8	1969	321.4	1968	528.7	5
	6680-01	PANDORA POINT CDM MAINT	34-13-31	117-18-32	01N/04W-5	1151	1965	1976	1821.1	1969	608.2	1968	1056.1	6
	6754-11	PATTON	34-08-15	117-12-30	01N/03W-5	419	1965	1976	799.4	1969	329.5	1968	494.6	6
	6754-20	PATTON SBVND	34-08-10	117-12-45	01N/03W-5	457	1976		282.2	1976				
	6818-12	PEARIS MILL -SAN BERNARDI	34-08-07	117-16-12	01N/04W-5	390	1965	1969	692.7	1969	1.6	1965	235.3	3
	7723-00	SAN BERNARDINO MED CENTER	34-07-40	117-16-00	01N/04W-5	343	1871	1980	1089.7	1986	152.5	1961	423.4	110
	7724-04	SAN BERNARDINO-FC OFF-SRG	34-06-16	117-16-01	01S/04W-5	319	1965	1976	681.5	1969	290.4	1975	426.6	9
	7724-36	SAN BERNARDINO HANFORD	34-06-15	117-17-20	01S/04W-5	314	1975	1976	304.7	1976	302.3	1975	303.5	2
	7724-90	SAN BERNARDINO-FC YO-RRNG	34-06-16	117-16-03	01S/04W-5	318	1976		277.6	1976				
	7891-00	SANTA ANA PH 3	34-06-25	117-06-00	01S/02W-5	604	1948	1978	758.3	1978	221.3	1972	369.5	12
	9016-40	TRI CITY AIRPORT SBVND	34-04-16	117-16-24	01S/04W-5	311	1976		266.9	1976				
	9018-50	TRI CITY ROCK SBVND	34-06-06	117-12-21	01S/03W-5	366	1976		260.5	1976				
	9323-51	VICTORIA LOMA LINDA	34-04-54	117-15-18	01S/04W-5	324	1965	1975	213.9	1975				
	9435-20	REDLANDS MCALLA SBVND	34-03-54	117-12-54	01S/03W-5	363	1976		185.2	1976				
	7306-00	REDLANDS-DAILY FACTS	34-03-08	117-11-28	01S/03W-5	407	1889	1980	717.2	1980	92.4	1961	356.6	91
Y-01.E3	7306-01	REDLANDS ROTH	34-02-02	117-12-32	01S/03W-5	378	1965	1969	615.2	1969	249.2	1968	417.5	4
	2116-51	CRAFTONVILLE SPRR	34-04-00	117-07-00	01S/02W-5	536	1892	1909	560.1	1905	133.7	1899	363.8	16
	5931-10	MENTONE BLUE GOOSE	34-04-01	117-07-09	01S/02W-5	503	1976		383.4	1976				
Y-01.E4	5931-31	MENTONE CDF SB 120	34-04-15	117-07-15	01S/02W-5	538	1965	1976	425.2	1967	227.1	1968	334.0	5
	2116-11	CRAFTON-SCHNEIDER	34-02-30	117-07-28	01S/02W-5	610	1965	1976	702.0	1969	332.3	1968	470.2	5
	2116-31	CRAFTON RES	34-02-46	117-07-20	01S/02W-5	610	1976		298.6	1976				
Y-01.E6	7306-50	REDLANDS BOTTENBURG	34-02-30	117-10-54	01S/03W-5	447	1976		345.0	1976				
	9875-04	YUCAIPA CO YDS	34-02-05	117-06-08	01S/02W-5	645	1965	1969	739.6	1969	397.6	1968	562.1	4
	1308-25	CALIFRESA EAST	34-00-16	117-01-00	02S/01W-5	897	1976		463.2	1976				
Y-01.E7	7894-00	SANTA ANA PH 1	34-07-50	117-04-20	02N/02W-5	843	1904	1968	1266.6	1916	232.7	1961	651.2	60
	2964-80	FALLSVALE S	34-04-55	116-54-20	01S/01E-5	1826	1976		967.8	1976				
	3129-60	FOREST FALLS	34-05-20	116-55-10	01S/01W-5	1554	1965	1976	2010.5	1969	616.3	1968	1123.5	6
Y-01.E8	5531-34	MENTONE GREEN SPOT	34-04-00	117-05-50	01S/02W-5	615	1965	1968	413.9	1966	302.9	1968	358.4	2
	5632-00	MILL CREEK INTAKE	34-05-20	116-54-19	01S/01W-5	1507	1948	1978	721.3	1973	416.5	1970	533.8	8
	5635-00	MILL CREEK R S	34-06-15	117-01-50	01S/01W-5	838	1975		401.7	1975				
Y-01.F1	7311-00	REDLANDS COUNTRY CLUB	34-01-09	117-08-55	02S/03W-5	634	1956	1976	902.2	1958	297.6	1968	509.6	15
	8788-50	TATE FILTER SBVND	34-04-23	117-04-30	01S/02W-5	701	1976		388.0	1976				
	6009-00	BEAUMONT IE	33-55-08	116-57-53	03S/01W-5	795	1942	1980	862.2	1978	186.4	1961	427.7	38
Y-01.F2	7887-11	SAN T-MOTED	33-58-10	117-07-30	03S/01W-5	489	1965	1976	667.3	1969	325.9	1968	448.2	4
	8263-00	SINGLETON RANCH	33-58-15	117-02-30	02S/02W-5	700	1935	1939	793.5	1937	300.2	1936	516.3	4
	6007-00	BEAUMONT PUMPING PL NR	33-58-06	116-57-05	02S/01W-5	928	1911	1975	970.9	1937	206.1	1961	527.6	64
Y-01.F3	5635-20	MILL CREEK RANGER STATION	34-04-45	117-02-47	01S/02W-5	847	1965	1976	905.3	1969	429.4	1968	614.1	5
	9875-00	YUCAIPA MARTIN	34-03-11	117-02-06	01S/01W-5	858	1976		440.7	1976				
	1308-05	CILINESA	34-00-13	117-03-29	02S/02W-5	732	1958	1978	827.1	1969	191.2	1972	377.1	19
Y-01.F4	9875-05	YUCAIPA CDF	34-01-58	117-02-12	02S/02W-5	811	1965	1969	711.3	1969	373.3	1968	523.6	3
	9875-07	YUCAIPA WATER CO	34-02-15	117-02-10	01S/02W-5	841	1965	1976	863.9	1969	410.2	1968	551.9	4
	5629-00	MILL CREEK NO 2	34-05-00	117-02-00	01S/02W-5	896	1903	1967	943.3	1937	214.0	1961	556.0	62
Y-01.F6	6310-12	OAK GLEN ROGER	34-03-18	116-57-15	01S/01W-5	1231	1965	1976	1380.9	1969	527.3	1975	775.4	6
	5310-11	OAK GLEN RISE	34-03-15	116-57-20	01S/01W-5	1426	1965	1969	776.2	1966				
	0741-00	BIG BEAR LAKE	34-15-00	116-55-00	01N/01W-5	2057	1960	1980	1450.7	1969	146.4	1966	631.4	17
Y-01.G1	0741-01	BIG BEAR LAKE F.O.	34-14-40	116-54-35	02N/01E-5	2056	1965	1976	1450.7	1969	397.5	1975	701.3	5
	0742-00	BIG BEAR LAKE DAM	34-14-26	116-58-29	02N/01W-5	2077	1892	1978	2208.3	1969	282.6	1896	673.1	34
	2974-00	FAWNSKIN	34-16-01	116-57-04	02N/01W-5	2079	1976		471.6	1976				
Y-01.G2	5561-00	MERRIMAN HEADQU SBVND	34-16-11	116-55-53	02N/01W-5	2295	1976							
	1369-00	CAMP ANGELUS	34-09-00	116-59-00	01N/01W-5	1759	1969	1978	1615.4	1978	335.4	1972	755.7	6
	1369-00	CAMP ANGELUS-LOENHORST	34-09-00	116-58-40	01N/01W-5	1762	1975	1976	797.3	1976	651.0	1975	724.2	2
Y-01.G3	3888-20	HEART BAR STATE PARK	34-09-34	116-47-43	01N/02E-5	2030	1975	1976	511.3	1976	314.6	1975	413.0	2
	8125-20	SEVEN OAKS	34-11-00	116-57-00	01N/01W-5	1547	1910	1955	1445.0	1922	0.0	1953	639.8	43
	0743-01	BIG BEAR CITY	34-15-40	116-50-30	02N/01E-5	2073	1965	1976	630.8	1969	202.5	1975	405.5	6
Y-01.G4	0743-20	BIG BEAR CITY RYAN	34-15-36	116-48-18	02N/01E-5	2134	1976		471.9	1976				
	4019-11	HOLCOMB	34-18-00	116-55-00	03N/01E-5	2207	1910	1916	886.5	1915	273.1	1912	504.7	7
Y-02.A1	1021-11	BOX SPRINGS	33-57-43	117-16-47		939	1951	1966	505.2	1952	89.9	1961	256.5	15
	2679-00	EDGEMONT	33-55-27	117-16-32	03S/04W-5	474	1965	1978	496.0	1969	124.7	1972	274.1	12
	3492-11	GOLD VALLEY RCH	33-47-34	117-20-20		655	1938	1963	589.0	1941	58.4	1959	275.5	24
Y-02.A2	3924-20	HENDRICKS ALF RCH SCOTT	33-55-00	117-10-00	03S/03W-5	472	1928	1939	536.0	1937	108.5	1934	278.4	11
	5325-00	HARSH FIELD AFB	33-52-50	117-15-00	03S/04W-5	453	1930	1944	453.2	1952	70.9	1961	226.6	29
	5815-00	PEARIS	33-51-40	117-12-03	04S/03W-5	463	1961	1973	567.3	1969	163.3	1964	285.9	6
Y-02.A3	6816-15	PEARIS RESERVOIR	33-50-04	117-11-29	04S/03W-5	441	1964	1978	548.4	1969	131.4	1972	256.6	13
	6818-00	PEARIS L VSW SMITH	33-46-46	117-14-42	04S/04W-5	488	1952	1957	270.2	1954	182.3	1956	226.5	4

TABLE 8. PRECIPITATION STATIONS BY AREAL CODE (continued)

AREAL CODE	DWR STATION NUMBER	STATION NAME	LATITUDE DEG MIN SEC	LONGITUDE DEG MIN SEC	TOWNSHIP & RANGE	ELEVATION	RECORD		MAXIMUM PRECIPITATION		MINIMUM PRECIPITATION		MEAN ANNUAL	YEARS OF RECORD
							YEAR BEGIN	YEAR END	MAX ANNUAL	YEAR OCCUR	MIN ANNUAL	YEAR OCCUR		
Y-02.A2	7221-01	RAILROAD CANYON DAM TWC	33-40-28	117-16-26	06S/04N-5	439	1927	1978	606.9	1941	86.1	1928	256.5	51
	8650-50	SUN CITY STP	33-41-44	117-12-32	05S/03N-5	430	1971	1978	295.5	1977	149.3	1972	236.8	7
	8650-55	SUN CITY	33-42-07	117-14-22	05S/03N-5	465	1974		194.6	1974				
	8650-75	SUN CITY S O F	33-42-55	117-11-25	05S/03N-5	435	1974	1978	270.9	1975	229.9	1974	256.2	4
Y-02.A3	9722-00	WINCHESTER-BLACKMORE-RRNG	33-42-35	117-04-50	05S/02N-5	450	1940	1976	527.1	1941	98.8	1961	241.9	25
Y-02.A4	4062-05	HOMELAND IN SEC 17	33-48-18	117-06-45	05S/02N-5	479	1962	1978	508.6	1969	183.3	1971	283.4	15
	4717-30	LAKEVIEW MCDONOUGH	33-50-00	117-07-00	04S/02N-5	447	1910	1939	656.1	1922	154.1	1934	329.8	27
	6299-20	MUVIEW - CDF FIRE STA	33-49-03	117-07-55	04S/02N-5	445	1958	1978	544.6	1969	102.1	1959	266.5	20
	6816-10	PERRIS DAM	33-50-58	117-09-52	04S/03N-5	482	1972	1973	194.9	1973				
Y-02.A5	3896-00	HEMET - LHMVD OFFICE	33-44-53	116-56-40	05S/01N-5	504	1911	1980	655.4	1922	122.0	1961	319.1	68
	4431-00	JUNIPER FLATS	33-45-49	117-04-57	05S/02N-5	643	1964	1978	547.4	1969	180.1	1971	314.6	12
	4814-15	LA SIERRA RCH FARRAR	33-45-00	117-00-06	05S/01N-5	472	1918	1939	655.4	1922	115.1	1934	298.6	21
	4979-20	LITTLE LAKE SDF	33-44-62	116-55-53	05S/01N-5	517	1960	1979	661.5	1978	141.9	1961	301.2	18
Y-02.B1	4979-40	LITTLE VALLEY SDF	33-44-62	116-55-53	05S/01N-5	517	1961	1975	458.6	1969	141.9	1961	270.6	15
	7613-11	RYAN FIELD	33-43-48	117-01-17	05S/01N-5	460	1956	1979	673.5	1978	91.5	1961	271.6	23
	0606-00	BEAUMONT	33-35-44	116-58-27	03S/01N-5	796	1888	1978	870.9	1978	188.0	1970	457.6	90
	0609-12	BEAUMONT S O F	33-35-47	116-57-00	03S/01N-5	792	1957	1978	796.9	1969	159.5	1961	413.4	21
Y-02.B2	1698-01	CHERRY VALLEY FS	33-58-32	116-58-20	02S/01N-5	872	1956	1978	683.5	1969	198.3	1961	458.7	22
	1698-02	CHERRY VALLEY LEE	33-58-19	116-58-24	02S/01N-5	860	1956	1965	717.7	1958	203.7	1961	394.0	9
	2324-00	DECKERS RANCH IDYLLWILD	33-48-00	116-45-00	04S/02E-5	1692	1920	1941	1698.2	1941	545.0	1928	966.4	21
	3414-50	GILMAN HOT SPRINGS	33-50-00	116-59-17	04S/01N-5	448	1944	1977	585.5	1958	137.9	1961	294.2	33
Y-02.B3	4208-00	IDYLLWILD - WILSON	33-44-47	116-42-51	05S/03E-5	1641	1901	1912	1135.8	1906	371.3	1904	701.2	10
	4211-00	IDYLLWILD FIRE DEPT RS	33-42-47	116-43-24	05S/07E-5	1645	1901	1980	1180.9	1980	208.1	1961	656.3	47
	4258-11	INDIO	33-42-48	116-13-25	05S/07E-5	2	1951	1978	159.3	1976	13.0	1972	65.3	29
	4839-60	LAHLER CO PARK	33-47-40	116-44-41	04S/02E-5	1612	1975	1978	858.2	1976	540.3	1977	699.3	2
Y-02.C1	5840-60	MORENO VALLEY	33-56-27	117-08-14	03S/02N-5	561	1976	1978	381.1	1976	330.3	1977	355.7	2
	7058-80	POPPET FLATS TERRIBILINI	33-50-53	116-51-34	04S/01E-5	1073	1937	1978	1144.6	1937	346.1	1951	630.3	15
	7810-00	SAN JACINTO JOHANSEN	33-47-15	116-58-06	04S/01N-5	468	1886	1978	663.4	1941	114.0	1961	318.4	86
	7811-00	SAN JACINTO RES RWD	33-47-45	116-59-55	04S/01N-5	457	1948	1974	642.8	1958	92.4	1961	277.1	26
Y-02.C2	7813-00	SAN JACINTO RS--RRNG	33-47-12	116-57-32	04S/01N-5	475	1948	1980	642.6	1978	98.3	1970	300.6	14
	8261-11	SIMS RANCH RWD	33-47-50	116-52-22	04S/01E-5	640	1938	1962	683.5	1958	133.3	1959	377.9	24
	9586-00	WEST PORTAL	33-49-16	116-57-59	04S/01N-5	460	1963	1976	405.7	1976	244.4	1964	364.0	7
	9600-05	WHITTIER GROVE-LHVC	33-45-55	116-53-50	05S/01E-5	536	1927	1939	808.0	1937	178.1	1934	402.1	11
Y-02.C3	1898-70	HEMET LAKE - L.H.M.W.D.	33-40-05	116-40-30	06S/03E-5	1326	1897	1971	877.1	1937	124.2	1961	477.8	74
	4181-00	MURKEY CREEK PARK	33-40-47	116-40-47	06S/03E-5	1338	1962	1978	836.5	1978	218.3	1972	468.9	17
	2805-00	ELSIANDRE - CDF FIRE STA	33-40-10	117-19-55	06S/04N-5	392	1897	1980	665.0	1906	105.1	1961	309.2	79
	2805-50	ELSIANDRE STATE PARK	33-40-32	117-22-21	06S/05N-5	386	1966	1978	726.7	1969	208.1	1970	344.7	11
Y-02.C4	2811-00	ELSIANDRE (NEAR) ASE-ALBRIGHT	33-38-00	117-16-00	06S/04N-5	442	1948	1957	432.8	1952	124.4	1951	218.6	8
	2812-00	ELSIANDRE & SSE	33-37-08	117-18-37	06S/04N-5	398	1957	1965	617.3	1958	132.9	1961	295.5	7
	2812-50	ELSIANDRE STATE PK + REC A	33-40-32	117-22-21	06S/05N-5	386	1966	1975	726.7	1969	208.1	1970	344.7	9
	4086-51	LAKELAND VILLAGE	33-38-13	117-20-44	06S/05N-5	402	1956	1978	801.9	1969	125.8	1961	355.3	22
Y-02.C5	8163-81	SHERMAN (ELSIANDRE)	33-41-00	117-23-06	05S/05N-5	396	1917	1952	914.8	1941	216.7	1951	425.1	31
	7306-38	REDLANDS FUNK	34-01-56	117-11-25	02S/03N-5	467	1975	1976	345.6	1976	234.0	1975	299.8	2
	4300-60	IRVINE HORD CANYON	33-33-20	117-49-18	07S/09N-5	30	1900	1944						
	4647-00	LAGUNA BEACH-SEWAGE DIS P	33-32-48	117-46-50	07S/09N-5	11	1929	1980	739.7	1941	102.8	1961	316.1	52
Z-01.A1	4647-01	LAGUNA BEACH HARVARE	33-32-33	117-46-55	07S/09N-5	9	1927	1978	745.7	1941	111.9	1961	313.5	52
	4650-00	LAGUNA BEACH 2-L.B.WAY D1	33-33-03	117-48-01	07S/09N-5	64	1948	1978	629.9	1978	133.7	1951	278.4	11
	2821-11	EL TORO-MOULTON RANCH	33-36-26	117-42-07	06S/08N-5	114	1877	1971	829.3	1884	117.3	1961	354.9	95
	2821-30	EL TORO LOS ALISOS RM	33-39-50	117-40-05	06S/08N-5	207	1929	1977	3800.3	1957	125.3	1961	450.0	43
Z-01.B0	0114-51	ALISO CANYON COOK	33-41-05	117-37-10	06S/07N-5	554	1945	1974	887.6	1969	201.3	1959	431.5	25
	2711-70	EL CARISO GUARD STATION	33-39-00	117-24-43	06S/05N-5	811	1866	1978	1067.3	1969	352.1	1977	570.5	9
	3939-60	HICKET CANYON JOPLIN	33-40-43	117-34-23	06S/07N-5	524	1966	1978	1092.9	1969	276.3	1977	556.6	10
	4057-10	HOLY JIM CANYON	33-41-00	117-30-54	06S/06N-5	585	1955	1961	659.2	1956	309.3	1961	481.3	6
Z-01.B1	5880-50	MOULTON MIGUEL	33-34-41	117-40-23	07S/08N-5	91	1970	1978	777.0	1978	190.1	1972	358.3	6
	7405-50	ROBINSON RANCH	33-39-46	117-33-43	07S/08N-5	366	1926	1967	920.9	1941	170.6	1961	462.8	42
	7836-51	SAN JUAN CAPISTRANO-HANKE	33-30-45	117-38-16	08S/07N-5	46	1905	1978	799.3	1922	122.4	1961	367.5	73
	7836-52	SAN JUAN CAPISTRANO-SOG+E	33-30-44	117-39-58	08S/08N-5	49	1924	1975	706.9	1941	116.6	1961	343.4	52
Z-01.B2	7837-00	SAN JUAN GUARD STA. -RRNG	33-35-30	117-30-47	07S/06N-5	223	1948	1978	872.9	1978	97.3	1961	339.8	19
	7993-00	SANTIAGO PEAR	33-42-39	117-31-59	05S/06N-5	1718	1950	1979	1454.0	1969	289.2	1961	735.0	30
	8992-00	TRABUCO CANYON -RRNG	33-39-26	117-35-22	06S/07N-5	296	1940	1978	939.6	1941	167.8	1961	409.3	36
	8992-01	TRABUCO CANYON	33-39-28	117-34-12	06S/07N-5	381	1965	1968	563.6	1967	509.1	1966	536.4	2
Z-01.C0	1507-50	CAPISTRANO BEACH RD YARD	33-28-03	117-41-02	08S/08N-5	6	1956	1979	4759.8	1967	105.1	1961	486.1	23
	0622-51	PALISADES RES-SAN CLEMENTE	33-27-46	117-39-02	08S/07N-5	110	1966	1978	654.3	1978	172.8	1972	313.2	12
	7729-30	SAN CLEMENTE - FIRE STA	33-25-40	117-36-52	08S/07N-5	41	1931	1946	664.7	1941	207.1	1934	371.4	13
	7731-20	SAN CLEMENTE POLICE	33-25-30	117-36-31	08S/07N-5	79	1931	1976	689.3	1941	98.3	1961	307.0	44
Z-01.C1	7866-20	SAN MATEO CR-CAMP PENOLET	33-28-15	117-28-30	08S/06N-5	128	1937	1973	807.2	1969	137.4	1961	379.5	11
	1557-75	CASE SPRING-CAMP PENOLET	33-26-40	117-24-55	08S/05N-5	721	1967	1975	1028.2	1969	236.3	1972	534.5	8
	7871-15	SAN ONOFRE-SOGEC&SCE-RRNG	33-22-00	117-33-06	09S/06N-5	24	1967	1973	380.9	1969	129.0	1972	226.7	7
	6377-11	OCEANSIDE-CAMP PENOLET	33-12-40	117-23-55	11S/05N-5	18								

APPENDIX C
SOUTH CENTRAL REGION

1. Coastal wind gages, South Central Region, whose data are available at the National Climatic Data Center. Additional stations are listed in Table 4.9. Appendix D contains a state-wide index.
2. Precipitation gages, San Luis Obispo County, with cross-reference and data output samples. Courtesy Ann Hall, San Luis Obispo County Flood Control and Water Conservation District.
3. Precipitation gages, Santa Barbara County. Revised 4/26/85; Courtesy of Phil Holland, Santa Barbara County Flood Control and Water Conservation District.
4. Precipitation gages, Ventura County, with cross reference and location map. Courtesy of Dolores Taylor, Ventura County Flood Control and Water Resources District.
5. Precipitation gages, South Central Region. From the California Department of Water Resources, Bulletin 230-81

1. Coastal wind gages, South Central Region, whose data are available at the National Climatic Data Center.
Additional stations are listed in Table 4.9.
Appendix D contains a state-wide index.

LOCATION	AGENCY NUMBER	LATITUDE	LONGITUDE	HOURLY START	RECORD STOP	OBS/ DAY	DIGITIZED RECORD
Pt Piedras Blancas	CG 23214	34-43	121-19	1974	1975	5	—
Piedras Blancas Field	AAF 23214	35-34	121-07	1943	1944	24	1943-44
Pt San Luis	CG 23268	35-10	120-46	1943	1946	24	—
Santa Maria	SAW 23236	34-56	120-76	1930	1933	5	—
Santa Maria	WAS 23236	34-56	120-25	1938	1942	5	—
Santa Maria	WAS 23236	34-54	120-22	1943	1951	24	1948-54
Vanderberg	AFB 93214	34-43	120-34	1951	1958	24	1954-964
Vanderberg	AFB 93214	34-43	120-34	1958	1974	6	1964 —
Vanderberg	AFB 93214	34-33	120-37	1975	1975	5	—
Pt Arguello	CG 23265	34-35	120-39	1966	1969	24	1958-1975
Pt Arguello	WBO 43215	34-40	120-35	1935	1941	3	1935 —
Pt Conception	CG	34-27	170-28	1943	1945	24	1966-69
Santa Barbara	FP 23190	34-26	119-50	1975	1975	5	—
Santa Barbara	FP 23190	34-26	119-50	1972	1973	5	—
Santa Barbara	FP 23190	34-26	119-51	1929	1941	5	—
Santa Barbara	FP 23190	34-26	119-51	1949	1946	24	1948-1964
Santa Barbara	CG	34-24	119-41	1943	1946	24	—
Santa Barbara	CG	34-24	119-41	1976	1976	4	—

LOCATION	AGENCY NUMBER	LATITUDE	LONGITUDE	HOURLY START	RECORD STOP	OBS/ DAY	DIGITIZED RECORD
Ventura Marina	CG	34-15	119-16	1976		5	-
Channel Islands Harbor	CG	34-10	119-13	1972		3	-
Oxnard	SAWR	34-12	119-12	1943		6	-
	"	"	"	1961	1965	24	-
Port Hueneme	NF 93187	34-09	119-12	1938	1941	5	-
Pt. Mugu	NF 93111	34-07	119-07	1946		24	506-

2. Precipitation gages, San Luis Obispo County, with cross-reference and data output samples. Courtesy Ann Hall, San Luis Obispo County Flood Control and Water Conservation District.

Precipitation Stations

Alphabetical by Station Name San Luis Obispo Co.

No.	Station Name	Location	Key	Elev.	Ten Ang Sec 40AC	B&N	Latitude	Longitude	Rec. Began	Rec. Ended
044.0	Adelaida	Gerst Nursery	1	1508	268/10E-14J	MD	35-40-00	120-51-30	1925	
177.2	Annette	X-D Ranch	1	2120	268/16E-13G	MD	35-40-03	120-11-51	1967	
147.0	Arroyo Grande	Betas Plumbing	2	115	328/13E-08D	MD	35-07-08	120-35-28	1956	1978
177.1A	Arroyo Grande	Corporate Yard	1	75	328/13E-29F	MD	35-06-47	120-36-25	1966	
195.1	Arroyo Grande	Police Department	1	115	328/13E-02D	MD	35-07-13	120-35-25	1974	
205.0	Arroyo Grande	Co. Road Yard	1	193	328/13E-21L	MD	35-07-33	120-35-20	1981	
034.0	Atascadero	Mutual Water Company	1	835	268/12E-10R	MD	35-10-06	120-39-30	1928	
156.1	Atascadero	Ray Wagner	1	1040	268/11E-35R	MD	35-27-27	120-44-56	1961	
100.0	Atascadero	Wastewater Plant	1	850	268/12E-15G	MD	35-29-43	120-39-57	1971	
133.0	Atascadero Pump Station	Standard Oil Company	1	1205	268/13E-04K	MD	35-31-12	120-34-30	1951	
055.0	Avila Beach	Union Oil Company	1	115	318/12E-36Q	MD	35-18-40	120-43-32	1933	
177.0	Baywood Park	C.S.A. No. 9	1	121	308/11E-07Q	MD	35-19-34	120-49-59	1966	
003.0	Buck Ranch	Simier	1	2050	298/19E-31	MD	35-21-06	119-58-37	1939	
065.0	Bitterwater	Standard Oil Company	1	1500	278/16E-34J	MD	35-33-35	120-05-09	1937	
106.0A	Black Mountain	Fed. Aviation Agency	1	3560	298/07E-15L	MD	35-23-41	120-21-12	1970	
180.0	Cambria	Caltrans	1	210	268/09E-06G	MD	35-31-50	120-02-25	1954	
191.0	Cambria	Wastewater Plant	1	20	278/08E-22P	MD	35-33-59	121-05-56	1972	
203.0	Cambria	Division of Forestry	1	210	278/08E-21	MD	35-31-52	120-06-11	1977	
130.0	Cannetti Canyon	Canyon Ranch	1	1220	278/15E-35D	MD	35-32-31	120-20-00	1952	
109.0	Camp Roberts	Post Engineer's Office	1	620	248/11E-35G	MD	35-40-04	120-45-05	1966	
119.0A	Camp San Luis Obispo	Chorro Reservoir	1	800	308/12E-09A	MD	35-20-14	120-41-18	1948	
192.1	Camp San Luis Obispo	Co. Operational Center	1	100	308/12E-18A	MD	35-19-17	120-43-15	1972	
129.1	Carrizo Plain	Traver Ranch	1	2125	11W/26E-02G	SB	35-04-15	119-37-42	1951	
151.2	Carrizo Plain	Kuhnie Ranch	1	2045	295/17E-24R	MD	35-23-46	120-05-30	1965	
194.2	Carrizo Plain	Washburn Ranch	1	2190	32E/20E-25H	MD	35-06-45	119-46-25	1973	
173.1	Cayucos Creek	Togmazzial Ranch	1	330	268/10E-17W	MD	35-29-40	120-55-21	1964	
101.1	Cottontail Creek	Whale Rock Dam	1	236	268/10E-27A	MD	35-20-35	120-52-25	1961	
120.1	Creston	Swease	1	1115	268/13E-01A	MD	35-31-42	120-30-54	1951	
052.1	Creston 5.5 NW	Brickson Ranch	1	1070	278/13E-15W	MD	35-34-22	120-34-00	1928	
059.0	Cypress Mountain Drive	71 Ranch	1	1400	278/10E-08G	MD	35-36-14	120-54-56	1951	
110.0	Dover Canyon	Louis Bergman	1	1160	278/10E-14J	MD	35-34-53	120-51-20	1946	
140.0	Eagle Creek	Eagle Ranch	1	1315	298/12E-03P	MD	35-25-44	120-40-33	1955	
092.0	Edna	Stornetta Ranch	1	425	318/13E-22D	MD	35-12-39	120-34-10	1940	
030.0	El Pomar	Runits Ranch	1	1150	278/13E-31R	MD	35-32-06	120-36-41	1914	
143.1	El Pomar	Bellert Ranch	1	1185	278/13E-33W	MD	35-31-55	120-35-08	1954	
122.0	Gillies Canyon	Highland Farm	1	2000	268/16E-34E	MD	35-37-27	120-14-47	1948	
112.0A	Hearest Castle	Fire Station	1	1545	268/07E-12H	MD	35-41-12	120-09-57	1946	
107.0	Hearest Castle	Visitor's Center	1	125	268/07E-23L	MD	35-39-03	121-11-11	1970	
199.0	Heritage Ranch	Wastewater Plant	1	890	258/10E-027W	MD	35-43-25	120-53-00	1975	
205.2	Holtinger's Cow Camp		1	1295	268/11E-26C	MD	35-20-08	120-32-34	1981	
206.0	Irish Hills	Denning	1	1420	318/12E-02W	MD	35-15-11	120-46-09	1981	
127.1	Lopez Lake	Spencer Ranch	1	510	318/14E-22F	MD	35-13-04	120-26-45	1951	
193.0	Lopez Lake	Wastewater Plant	1	530	318/14E-27R	MD	35-12-12	120-27-32	1972	
170.1B	Lopez Reservoir	Lopez Dam	1	547	318/14E-33E	MD	35-11-12	120-29-03	1968	
179.1	Lopez Terminal Res.	Treatment Plant	1	335	328/12E-01G	MD	35-10-13	120-31-57	1969	
144.1	Los Osos	H. J. Bender	1	170	308/11E-18R	MD	35-18-36	120-40-34	1954	
197.0	Los Osos	South Bay Fire Depart.	1	160	308/11E-18Q	MD	35-18-35	120-49-58	1972	
093.0	McMillan Canyon	White Ranch	1	1650	258/15E-21P	MD	35-43-55	120-22-00	1940	
205.1	Mike Salodi	Shandon	1	1015	268/15E-18K	MD	35-39-37	120-23-35	1981	
052.0	Morro Bay	JW	1	640	296/10E-12	MD	35-24-57	120-51-01	1929	
195.0	Morro Bay	Navy Fuel Depot	1	60	298/10E-14H	NU	35-24-21	120-51-45	1972	
150.0	Macielento Reservoir	Macielento Dam	1	770	258/10E-15C	MD	35-46-	120-53	1957	
030.0	Nipomo	2NW	1	360	11W/34W-06	SB	35-04-	120-30	1920	
151.1	Nipomo	State Div. of Forestry	1	320	11W/34W-08W	SB	35-02-26	120-29-10	1958	
141.1	Oak Park	A. B. Cunningham	1	200	328/13E-08	MD	35-09-06	120-35-47	1953	
201.0	Oak Shores	Wastewater Plant	1	850	258/09E-15J	MD	35-45-10	120-59-02	1975	
157.1	Oceano	C.S.A. No. 13	1	80	328/13E-32D	MD	35-06-16	120-36-35	1960	
194.0	Oceano	Wastewater Plant	1	10	328/13E-31P	MD	35-06-05	120-37-26	1973	
196.1	Old Canyon	Mate Vincent	1	1250	298/11E-29H	MD	35-20-70	120-40-05	1974	
190.0	Parkfield	Wilson Ranch	1	1309	248/15E-17C	MD	35-50-46	120-22-44	1971	
010.0	Paso Robles	Water Department	1	700	268/12E-33B	MD	35-37-41	120-41-05	1887	
101.0	Paso Robles	State Div. of Forestry	1	700	278/12E-16E	MD	35-36-53	120-41-44	1943	
177.3	Paso Robles	County Yard	1	700	268/12E-28Q	MD	35-37-30	120-41-03	1967	
177.4	Paso Robles	75W Renolds	1	1380	278/11E-16B	MD	32-35-05	120-47-01	1967	
120.0	Pozo	McNeil Ranch	1	1560	308/14E-23W	MD	35-17-27	120-27-01	1951	
190.0	Reservoir Canyon	P. J. Zuidervog	1	450	308/13E-30D	MD	35-17-30	120-37-35	1975	
094.0	Salinas Reservoir	Salinas Dam	1	1350	308/14E-08D	MD	35-20-14	120-30-08	1942	
126.1	Salinas Reservoir	J. Epperly Ranch	1	1420	308/14E-17C	MD	35-19-21	120-29-53	1949	
202.0	Salinas Reservoir	Co. Park Main Gate	1	1386	308/14E-08R	MD	35-19-30	120-29-32	1976	
159.1	San Bernardo Creek Road	San Bernardo Ranch	1	350	298/11E-23L	MD	35-23-22	120-45-52	1961	
194.1	San Juan Creek	San Juan Ranch	1	1380	288/16E-12C	MD	35-10-45	120-12-20	1973	
143.0	San Luis Obispo	Caltrans	1	150	308/12E-34Q	MD	35-16-00	120-40-13	1954	
001.0A	San Luis Obispo	Cal Poly	1	300	308/12E-33D	MD	35-18-20	120-39-47	1869	
054.0	San Luis Obispo	Union Oil Company	1	118	318/12E-11D	MD	35-14-50	120-39-47	1932	
096.0	San Luis Obispo	State Div. of Forestry	1	330	308/12E-22P	MD	35-18-07	120-40-34	1944	
129.0	San Luis Obispo	Peruzzi Ranch	1	470	318/13E-06G	MD	35-19-40	120-37-20	1951	
145.1A	San Luis Obispo	Wastewater Plant	1	130	318/12E-03K	MD	35-15-16	120-41-24	1954	
125.0	San Miguel	Sinclair	1	620	258/12E-17A	MD	35-45-32	120-41-30	1949	
176.0	San Miguel	Co. WW No. 1	1	645	258/12E-17J	MD	35-45-12	120-41-53	1965	
049.0	San Simeon	Hearest Ranch	1	150	268/07E-23C	MD	35-39-30	121-11-21	1939	
060.0	Santa Margarita	Union Oil Company	1	974	298/13E-17G	MD	35-14-30	120-36-06	1933	
095.0A	Santa Margarita	Booster Station	1	1153	298/12E-25R	MD	35-22-25	120-38-14	1942	
023.0	Santa Maria Valley	Suey Ranch	1	500	11S/33E-32D	SB	35-00-	120-23-	1909	
109.0	Santa Rosa Creek	Soto Ranch	1	440	278/09E-22T	MD	35-34-22	120-59-03	1963	
053.0	Shandon	Union Oil Company	2	1091	268/15E-07W	MD	35-41-30	120-20-05	1930	1979
067.0	Shandon	Standard Oil Company	1	1056	268/15E-16B	MD	35-40-15	120-21-35	1937	
073.0	Shandon	Caltrans	1	1090	268/15E-20G	MD	35-19-09	120-22-41	1937	
071.0	Simier	Caltrans	1	2016	308/10E-01R	MD	35-21-04	119-50-39	1944	
175.0	Simier	State Div. of Forestry	1	1960	308/18E-01A	MD	35-21-05	119-59-12	1965	
204.0	Simier	County Yard	1	2049	308/10E-01C	MD	35-21-05	119-59-45	1979	
070.1	Simier 2.6 WSW	Jon Cooper	1	2012	308/18E-04R	MD	35-20-17	120-02-27	1937	
043.0	Templeton	Post Office	1	800	278/12E-29L	MD	35-32-55	120-42-00	1931	
196.0	Templeton	Caltrans	1	787	278/12E-20C	MD	35-16-01	120-42-01	1974	
165.0	Twitchell Reservoir	Twitchell Dam	2	587	11W/33W-35	SB	34-59-	120-19-	1962	
100.0	Upper Arroyo Grande Rd	Ranchita Ranch	1	655	318/14E-25P	MD	35-12-03	120-25-47	1943	
153.0	Upper Arroyo Grande	Bettencourt	1	765	318/14E-05L	MD	35-15-13	120-29-56	1959	
166.1	Whale Rock Reservoir	Whale Rock Dam	1	250	288/10E-34L	MD	35-26-52	120-53-06	1964	
075.1	York Mountain	York Mountain Winery	1	1380	278/11E-31R	MD	35-32-30	120-49-	1938	
139.0A	York Mountain	Deliganna Ranch	1	1275	278/10E-35R	MD	35-32-02	120-51-38	1956	

* 'R' recording rain gage

Station Number Order

001.0R	San Luis Obispo	Cal Poly	1	300	30S/12E-23D	MD	35-18-20	120-39-47	1969
010.0	Paso Robles	Water Department	1	700	26S/12E-33B	MD	35-37-41	120-41-05	1987
023.0	Santa Maria Valley	Suey Ranch	1	500	11S/33E-32D	SB	35-00-	120-23-	1909
030.0	El Pomar	Runitz Ranch	1	1150	27S/13E-31K	MD	35-32-06	120-36-41	1914
034.0	Atascadero	Mutual Water Company	1	835	28S/12E-10R	MD	35-30-06	120-39-38	1920
038.0	Nipomo	2NW	1	360	11N/34W-06F	SB	35-04-	120-30	1920
043.0	Templeton	Post Office	1	800	27S/12E-29L	MD	35-32-55	120-42-00	1931
044.0	Adelaida	Gerat Nursery	1	1500	26S/10E-14J	MD	35-40-00	120-51-30	1925
052.0	Morro Bay	3M	1	640	29S/10E-12	MD	35-24-57	120-51-01	1929
052.1	Creston 5.5 NW	Erickson Ranch	1	1070	27S/13E-15N	MD	35-34-22	120-34-08	1928
053.0	Shandon	Union Oil Company	2	1091	26S/15E-02N	MD	35-41-30	120-20-05	1930
054.0	San Luis Obispo	Union Oil Company	1	118	31S/12E-11D	MD	35-14-50	120-39-47	1932
055.0	Avila Beach	Union Oil Company	1	115	31S/12E-36Q	MD	35-10-40	120-43-32	1933
059.0	Cypress Mountain Drive	7X Ranch	1	1400	27S/10E-08G	MD	35-36-14	120-54-56	1951
060.0	Santa Margarita	Union Oil Company	1	974	29S/13E-17G	MD	35-24-30	120-36-06	1933
065.0	Bitterwater	Standard Oil Company	1	1500	27S/18E-24J	MD	35-33-35	120-05-09	1937
067.0	Shandon	Standard Oil Company	1	1056	26S/15E-16B	MD	35-40-15	120-21-35	1937
069.0	San Simeon	Hearst Ranch	1	130	26S/07E-23C	MD	35-39-30	121-11-21	1939
070.1	Simmler 2.6 WSW	Jon Cooper	1	2012	30X/18E-04R	MD	35-20-17	120-02-27	1937
071.0	Simmler	Caltrans	1	2016	30S/18E-01B	MD	35-21-04	119-58-39	1944
073.0	Shandon	Caltrans	1	1090	26S/15E-20G	MD	35-39-09	120-22-41	1937
075.1	York Mountain	York Mountain Winery	1	1380	27S/11E-31B	MD	35-32-30	120-49-	1930
083.0	Beck Ranch	Simmler	1	2050	29S/19E-31	MD	35-21-06	119-58-37	1939
092.0	Edna	Stornetta Ranch	1	425	31S/13E-22D	MD	35-12-39	120-34-10	1940
093.0	McMillan Canyon	White Ranch	1	1650	25S/15E-21P	MD	35-43-55	120-22-00	1940
094.0	Salinas Reservoir	Salinas Dam	1	1350	30S/14E-08D	MD	35-20-14	120-30-08	1942
095.0R	Santa Margarita	Booster Station	1	1153	29S/12E-25K	MD	35-22-25	120-38-14	1942
096.0	San Luis Obispo	State Div. of Forestry	1	330	30S/12E-22P	MD	35-18-07	120-40-34	1944
100.0	Upper Arroyo Grande Rd	Ranchita Ranch	1	655	31S/14E-25P	MD	35-12-03	120-25-47	1943
101.0	Paso Robles	State Div. of Forestry	1	700	27S/12E-16E	MD	35-34-53	120-41-44	1943
109.0	Camp Roberts	Post Engineer's Office	1	620	24S/11E-35G	MD	35-48-04	120-45-05	1946
110.0	Dover Canyon	Louis Bergman	1	1160	27S/10E-14J	MD	35-34-53	120-51-20	1946
112.0R	Hearst Castle	Fire Station	1	1565	26S/07E-12B	MD	35-41-12	120-09-57	1946
119.0R	Camp San Luis Obispo	Chorro Reservoir	1	800	30S/12E-09A	MD	35-20-14	120-41-18	1948
122.0	Gillis Canyon	Highland Farm	1	2000	26S/16E-34E	MD	35-37-27	120-14-47	1948
125.0	San Miguel	Sinclair	1	620	25S/12E-17A	MD	35-45-32	120-41-38	1949
126.1	Salinas Reservoir	J. Epperly Ranch	1	1420	30S/14E-17C	MD	35-19-21	120-29-53	1949
127.1	Lopez Lake	Spencer Ranch	1	510	31S/14E-22P	MD	35-13-04	120-26-45	1951
128.0	Pozo	McNeil Ranch	1	1560	30S/14E-23N	MD	35-17-27	120-27-01	1951
128.1	Creston	Swayze	1	1115	28S/13E-01A	MD	35-31-42	120-30-54	1951
129.0	San Luis Obispo	Perozzi Ranch	1	470	31S/13E-06G	MD	35-15-40	120-37-20	1951
129.1	Carrizo Plain	Traver Ranch	1	2125	11N/26W-02G	SB	35-04-15	119-37-42	1951
133.0	Atascadero Pump Station	Standard Oil Company	1	1205	28S/13E-04K	MD	35-31-12	120-34-30	1951
138.0	Cammatti Canyon	Canyon Ranch	1	1220	27S/15E-35D	MD	35-32-31	120-20-00	1952
139.0R	York Mountain	Dellaganna Ranch	1	1275	27S/10E-35R	MD	35-32-02	120-51-30	1956
141.1	Oak Park	A. B. Cunningham	1	200	32S/13E-08	MD	35-09-06	120-35-47	1953
143.0	San Luis Obispo	Caltrans	1	150	30S/12E-34Q	MD	35-16-00	120-40-13	1954
143.1	El Pomar	Ballert Ranch	1	1185	27S/13E-33M	MD	35-31-55	120-35-08	1954
144.1	Los Osos	N. J. Bender	1	170	30S/11E-18R	MD	35-18-36	120-48-34	1954
145.1R	San Luis Obispo	Wastewater Plant	1	130	31S/12E-03K	MD	35-15-16	120-41-24	1954
147.0	Arroyo Grande	Bates Plumbing	2	115	32S/13E-08D	MD	35-07-08	120-35-28	1956
148.0	Eagle Creek	Eagle Ranch	1	1315	29S/12E-03P	MD	35-25-44	120-40-33	1955
150.0	Nacimiento Reservoir	Nacimiento Dam	1	770	25S/10E-15C	MD	35-46-	120-53	1957
151.1	Nipomo	State Div. of Forestry	1	320	11N/34W-08N	SB	35-02-26	120-29-10	1958
151.2	Carrizo Plain	Kuhnle Ranch	1	2045	29S/17E-24R	MD	35-23-46	120-05-38	1959
153.0	Upper Lopez Canyon	Bettencourt	1	745	31S/14E-05L	MD	35-15-13	120-29-56	1965
156.1	Atascadero	Ray Wagner	1	1040	28S/11E-35R	MD	35-27-27	120-44-56	1961
157.1	Oceano	C.S.A. No. 13	1	80	32S/13E-32D	MD	35-06-16	120-36-35	1960
159.1	San Bernardo Creek Road	San Bernardo Ranch	1	350	29S/11E-23L	MD	35-23-22	120-45-52	1961
165.0	Twitchell Reservoir	Twitchell Dam	3	582	11N/33W-35	SB	34-59-	120-19-	1962
166.1	Whale Rock Reservoir	Whale Rock Dam	1	250	28S/10E-34L	MD	35-26-52	120-53-06	1964
169.0	Santa Rosa Creek	Soto Ranch	1	440	27S/09E-22J	MD	35-34-22	120-59-03	1963
173.1	Cayucos Creek	Tognazzini Ranch	1	330	28S/10E-17N	MD	35-29-40	120-55-21	1964
175.0	Simmler	State Div. of Forestry	1	1968	30S/18E-01A	MD	35-21-05	119-59-12	1965
176.0	San Miguel	Co. WW No. 1	1	645	25S/12E-17J	MD	35-45-12	120-41-53	1965
177.0	Baywood Park	C.S.A. No. 9	1	121	30S/11E-07Q	MD	35-19-34	120-49-59	1966
177.1R	Arroyo Grande	Corporate Yard	1	75	32S/13E-29P	MD	35-06-47	120-36-25	1966
177.2	Annette	X-D Ranch	1	2120	26S/16E-13G	MD	35-40-05	120-11-51	1967
177.3	Paso Robles	County Yard	1	700	26S/12E-28Q	MD	35-37-30	120-41-03	1967
177.4	Paso Robles	75W Reynolds	1	1380	27S/11E-16B	MD	32-35-05	120-47-01	1967
178.1R	Lopez Reservoir	Lopez Dam	1	547	31S/14E-33E	MD	35-11-12	120-29-03	1968
179.1	Lopez Terminal Res.	Treatment Plant	1	335	32S/13E-01G	MD	35-10-13	120-31-57	1969
180.0	Cambria	Caltrans	1	218	28S/09E-06G	MD	35-31-50	120-02-25	1954
181.1	Cottontail Creek	Whale Rock Dam	1	236	28S/10E-27A	MD	35-28-35	120-52-25	1961
186.0R	Black Mountain	Fed. Aviation Agency	1	3560	29S/07E-15L	MD	35-23-41	120-21-12	1970
187.0	Hearst Castle	Visitor's Center	1	125	26S/07E-23L	MD	35-39-03	121-11-11	1970
188.0	Atascadero	Wastewater Plant	1	850	28S/12E-15G	MD	35-29-43	120-39-57	1971
190.0	Parkfield	Wilson Ranch	1	1309	24S/15E-17C	MD	35-50-46	120-22-44	1971
191.0	Cambria	Wastewater Plant	1	20	27S/08E-22P	MD	35-33-59	121-05-56	1972
192.1	Camp San Luis Obispo	Co. Operational Center	1	100	30S/12E-18A	MD	35-19-17	120-43-15	1972
193.0	Lopez Lake	Wastewater Plant	1	530	31S/14E-27B	MD	35-12-12	120-27-32	1972
194.0	Oceano	Wastewater Plant	1	10	32S/13E-31P	MD	35-06-05	120-37-26	1973
194.1	San Juan Creek	San Juan Ranch	1	1380	28S/16E-12C	MD	35-30-45	120-12-20	1973
194.2	Carrizo Plain	Washburn Ranch	1	2190	32S/20E-25M	MD	35-06-45	119-46-25	1973
195.0	Morro Bay	Navy Fuel Depot	1	60	29S/10E-14H	MD	35-24-21	120-51-45	1972
195.1	Arroyo Grande	Police Department	1	115	32S/13E-02D	MD	35-07-13	120-35-25	1974
196.0	Templeton	Caltrans	1	782	27S/12E-20G	MD	35-34-01	120-42-01	1974
196.1	Old Canyon	Mate Vincent	1	1250	29S/11E-29N	MD	35-28-20	120-48-05	1974
197.0	Los Osos	South Bay Fire Depart.	1	160	30S/11E-18Q	MD	35-18-35	120-49-58	1972
198.0	Reservoir Canyon	P. J. Zuidervog	1	450	30S/13E-30D	MD	35-17-30	120-37-35	1975
199.0	Heritage Ranch	Wastewater Plant	1	890	25S/10E-07M	MD	35-43-25	120-53-00	1975
201.0	Oak Shores	Wastewater Plant	1	650	25S/09E-15J	MD	35-45-10	120-59-02	1975
202.0	Salinas Reservoir	Co. Park Main Gate	1	1386	30S/14E-08R	MD	35-19-30	120-29-32	1976
203.0	Cambria	Division of Forestry	1	210	27S/08E-21	MD	32-31-52	120-06-11	1977
204.0	Simmler	County Yard	1	2049	30S/18E-01C	MD	35-21-05	119-59-45	1979
205.0	Arroyo Grande	Co. Road Yard	1	193	32S/13E-21L	MD	35-07-33	120-35-20	1981
205.1	Mike Salodi	Shandon	1	1015	26S/15E-18K	MD	35-39-37	120-23-35	1981
205.2	Moltinger's Cow Camp		1	1295	28S/13E-26C	MD	35-28-08	120-32-34	1981
206.0	Irish Hills	Denning	1	1420	31S/11E-02N	MD	35-15-11	120-46-09	1981

Sample of Precipitation Report

MONTHLY PRECIPITATION

STATION 203.0 CAMBRIA (STATE DIVISION OF FORESTRY)

SEASON	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	ANL
1976 - 1977	.00	1.80	3.19	.16	1.41	2.55	2.23	.55	1.91	.00	.86	.01	14.67
1977 - 1978	.00	.00	.18	.25	1.08	6.69	9.50	6.15	6.40	3.51	.00	.04	33.80
1978 - 1979	.00	.00	1.18	.00	3.62	1.17	6.10	5.15	4.12	.43	.11	.00	21.88
1979 - 1980	.00	.00	.00	1.08	2.32	3.17	6.07	6.16	1.87	1.14	.47	.01	22.29
1980 - 1981	.27	.00	.00	.00	.07	.95	2.91	1.76	8.11	.15	.00	.00	14.22
1981 - 1982	.00	.00	.00	1.07	2.17	2.22	4.09	4.51	4.87	4.55	.00	.17	23.65
1982 - 1983	.00	.08	.65	1.38	3.57	2.77	6.95	5.77	9.96	3.92	.18	.00	37.01
1983 - 1984	.00	.30	1.25	2.67	3.73	3.93	.20	.85	.93	.78	.00	.00	14.64
AVERAGE	.03	.27	.80	.82	2.24	2.93	4.75	3.86	4.77	1.81	.20	.02	22.77

NOTE: T = TRACE AMOUNT E = ESTIMATED AMOUNT N = NO DATA RECORDED (NOT INCLUDED IN THE AVERAGE).
 AN ANNUAL AMOUNT OF .00 INDICATES THE DATA FOR THAT YEAR IS INCOMPLETE (NOT INCLUDED IN THE AVERAGE).

RED017-R005

MONTHLY PRECIPITATION IN ORDER OF MAGNITUDE

STATION 203.0 CAMBRIA (STATE DIVISION OF FORESTRY)

MAGNITUDE	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE
1	-27	1.80	3.19	2.67	3.73	6.69	9.50	6.16	9.96	4.55	.86	.17
2	.00	.30	1.25	1.38	3.62	3.93	6.95	6.15	8.11	3.92	.47	.04
3	.00	.08	1.18	1.08	3.57	3.17	6.10	5.77	6.40	3.51	.18	.01
4	.00	.00	.65	1.07	2.32	2.77	6.07	5.15	4.87	1.14	.11	.01
5	.00	.00	.18	.25	2.17	2.55	4.09	4.51	4.12	.78	.00	.00
6	.00	.00	.00	.16	1.41	2.22	2.91	1.76	1.91	.43	.00	.00
7	.00	.00	.00	.00	1.08	1.17	2.23	.85	1.87	.15	.00	.00
8	.00	.00	.00	.00	.07	.95	.20	.55	.93	.00	.00	.00
AVERAGE	.03	.27	.80	.82	2.24	2.93	4.75	3.86	4.77	1.81	.20	.02

NOTE: T = TRACE AMOUNT, E = ESTIMATED AMOUNT, N = NO DATA RECORDED (NOT INCLUDED IN THE AVERAGE).

Sample

RED014-0003

ANNUAL PRECIPITATION IN ORDER OF MAGNITUDE

STATION 203.0 CAMBRIA (STATE DIVISION OF FORESTRY)

MAG	SEASON	RAINFALL	MAG	SEASON	RAINFALL	MAG	SEASON	RAINFALL
1	1982 - 1983	37.01	7	1976 - 1977	14.67	13	1980 - 1981	14.22
2	1977 - 1978	33.80	8	1983 - 1984	14.64	14		
3	1981 - 1982	23.65	9			15		
4	1979 - 1980	22.29	10			16		
5	1978 - 1979	21.88	11			17		
6	1976 - 1977	14.67	12			18		
7	1983 - 1984	14.64	13			19		
8	1980 - 1981	14.22	14			20		

AVERAGE ANNUAL PRECIPITATION 22.77

NOTE: A BLANK IN THE RAINFALL COLUMN INDICATES THE DATA FOR THAT YEAR IS INCOMPLETE (NOT INCLUDED IN THE AVERAGE).

3. Precipitation gages, Santa Barbara County. Revised 4/26/85;
Courtesy of Phil Holland, Santa Barbara County Flood Control
and Water Conservation District.

SANTA BARBARA COUNTY RECORDING RAINGAGE STATIONS

STATION NO. I.D.	STATION NAME	LATITUDE	LONGITUDE	ELEVATION	DATE EST.	DATE CLD.	OWNERSHIP
# 201 L P L	Los Flores Ranch	34°47'	120°20'	650	1/1962	1/1974	S.B.C.F.C.D.
# 202 C O N	Confaglia Ranch	34°44'	120°14'	680	12/1961	11/1976	S.B.C.F.C.D.
# 203 L U I	Luis Ranch	34°43'	120°22'	920	1/1964	1/1974	S.B.C.F.C.D.
# 204 L A L	Los Alamos Fire Sta.	34°44'	120°17'	580	10/1964		S.B.C.F.C.D.
# 205 B U R	Burton Mesa Fire Sta.	34°41'	120°26'	240	11/1964		S.B.C.F.C.D.
# 206 G A V	Gaviota State Park	34°28'	120°14'	5	10/1964		S.B.C.F.C.D.
# 207 O Z E	Ozena R.S.-Ventura	34°41'	119°21'	3580	11/1972		U.S.W.B.
# 208 C A R	Carpinteria Fire Sta.	34°24'	119°31'	15	3/1965		S.B.C.F.C.D.
# 209 C R R	Carpinteria Reservoir	34°25'	119°30'	240	10/1964		U.S.W.B.
# 210 C L D	Cold Springs Deb. Basin	34°27'	119°37'	550	12/1964	10/10/1980	S.B.C.F.C.D.
# 211 R D S	S.B. Co. Rd. Yard	34°27'	119°46'	220	9/1966		S.B.C.F.C.D.
# 212 S M P	San Marcos Pass Summit	34°31'	119°49'	2200	3/1964		S.B.C.F.C.D.
# 213 S M A	Santa Maria Airport	34°54'	120°27'	254	5/1940		U.S.W.B.
# 214 V A N	Vandenberg A.F.B.	34°44'	120°35'	368	7/1951		U.S.A.F. (no records 2/53 to 7/57)
# 215 L F C	Lompoc F.C. Yard	34°39'	120°27'	96	12/1961	1/1971	S.B.C.F.C.D.
# 216 S U R	Surf Treatment Plant	34°41'	120°34'	110	6/1897		U.S.W.B.
# 217 J A L	Jalama Beach	34°30'	120°30'	15	3/1968		S.B.C.F.C.D.
# 218 S Y F	Santa Ynez Fire Sta.	34°37'	120°05'	600	10/1938		U.S.W.B./S.B.C.F.C.D.
# 219 F I G	Figueroa Mt. F.S.	34°44'	120°00'	3200	3/1940		U.S.W.B.
# 220 W P R	Wasioja Phoenix Ranch	34°59'	119°54'	2370	7/1960		U.S.W.B.

SANTA BARBARA COUNTY RECORDING RAINGAGE STATIONS

STATION NO. & I.D.	STATION NAME	LATITUDE	LONGITUDE	ELEVATION	DATE EST.	DATE CLD.	OWNERSHIP
# 221 C U Y	Cuyama Ranch	34°59'	119°40'	2170	11/1947		S.B.C.F.C.D.
# 222 S M P	San Marcos Pass-Fischer	34°31'	119°49'	2300	1/1968		U.S.W.B.
# 223 S S F	Sisquoc S. Fork Camp	34°46'	119°46'	2500	1/1946	8/1965	U.S.W.B./Corps
# 224 P M I	Pine Mt. Inn-Ventura	34°36'34"	119°21'50"	4200	1/1965		U.S.W.B.
# 225 S B S	S.B. City Sanitation Pl.	34°25'	119°49'	5	7/1867		U.S.W.B.
# 226 D P R	Dos Pueblos Ranch	34°27'	119°57'	160	1/1947		Private
# 227 K G U	KGUD Towers	34°28'13"	119°40'32"	2350	9/1965		S.B.C.F.C.D.
# 228 S T A	Stanwood Dr. Fire Sta.	34°27'	119°41'	700	1/1953		S.B. City
# 229 C A T	Cater Treatment Plant	34°26'	119°44'	250	1/1967		S.B. City Water Dept.
# 230 G I B	Gibraltar Dam	34°31'	119°41'	1550	6/1941		U.S.W.B./S.B.C.F.C.D.
# 231 D O U	Doulton Tunnel Univ.	34°27'	119°30'	1930	8/1965		S.B.C.F.C.D.
# 232 J U N	Juncal Dam	34°29'	119°30'	2075	9/1965		S.B.C.F.C.D.
# 233 B U E	Buellton Fire Sta.	34°37'	120°12'	360	9/1965		S.B.C.F.C.D.
# 234 F C D	S.B. Flood Control Off.	34°24'30"	119°42'50"	100	9/1965		S.B.C.F.C.D.
# 235 S M R	Santa Maria Rd. Yard	34°57'	120°27'	200	10/1965	11/1978	S.B.C.F.C.D.
# 236 N O J	Nojoqui Falls Park	34°32'	120°11'	720	9/1965		S.B.C.F.C.D.
# 237 M A Z	Manzana School	34°50'	120°00'	1200	8/1965		S.B.C.F.C.D.
# 238 S B P	Santa Barbara Potrero	34°46'	119°39'	4960	1/1946		S.B.C.F.C.D.
# 239 P O S	Potrero Seco-Ventura	34°38'18"	119°25'18"	4860	1/1946		Ventura County
# 240 N A W	N. Amer. Weather Cons.	34°26'	119°50'	10	1/1968		N.O.R.W.A.C.

SANTA BARBARA COUNTY RECORDING RAINGAGE STATIONS

STATION NO. & I.D.	STATION NAME	LATITUDE	LONGITUDE	ELEVATION	DATE EST.	DATE CLD.	OWNERSHIP
# 241 S T B	Stubhaer Res.	34°26'	119°53'	120	12/1965	1/1970	S.B.C.F.C.D.
# 242 T R O	Trout Club	34°29'	119°48'	1200	3/1966		S.B.C.F.C.D.
# 243 M A D	Matilija Dam-Ventura	34°29'02"	119°18'	1060	8/1902		V.C.F.C.D.
# 244 H O R	Horse Gulch	34°50'	120°01'	1100	12/1966	10/1971	S.B.C.F.C.D.
# 245 G O R	Goodchild Ranch-La Brea	34°52'45"	120°07'00"	880	12/1966	10/1971	S.B.C.F.C.D.
# 246 V E N	Ventucopa R.S.	34°51'	119°29'	2749	9/1938	11/1972	U.S.W.B.
# 247 H U S	Husana R.S.	35°06'	120°23'	715	5/1940		U.S.W.B.
# 248 C A C	Cachuma Dam	34°35'	119°59'	781	10/1951		U.S.W.B.
# 249 M M T	Manzanita Mt.	34°54'	120°05'	3193	2/1944		S.B.C.F.C.D.
# 250 C A P	Cal Poly-S.L.Q. Co.	34°31'	120°40'	315	8/1894		U.S.W.B.
# 251 M I S	Miguelito Springs	34°34.7'	120°29.7'	1080	11/1967		S.B.C.F.C.D.
# 252 E D I	Edison Trail	34°27'	119°30'	1650	3/1968		S.B.C.F.C.D.
# 253 M A R	U.C.S.B. Marine Lab	34°24'30"	119°50'30"		1969	1969	U.C.S.B.
# 254 E C L	El Capitan Lodge-S.Y. PK	34°32'	120°01'	3500	1/1968	4/1978	N.O.R.W.A.C.
# 255 G R A	Graham Ranch	34°29'30"	119°41'45"	3300	12/1969		S.B.C.F.C.D.
# 256 S I S	Sisquoc Fire Sta.	34°52'	120°18'	420	1/1970		S.B.C.F.C.D.
# 257 J U L	Rancho San Julian	34°31.8'	120°22.2'	640	10/1970		S.B.C.F.C.D.
# 258 M I D	Miguelito Deb. Basin	34°38'	120°27'45"	105	1/1971		S.B.C.F.C.D.
# 259 M A N	Johns Mansville Plant	34°36'	120°27'	570	2/1971		S.B.C.F.C.D.
# 260 S E L	Selby Ranch Ventura	34°25'29"	119°21'15"	660	7/1964		V.C.F.C.D.

SANTA BARBARA COUNTY RECORDING RAINGAGE STATIONS

STATION NO. & I.D.	STATION NAME	LATITUDE	LONGITUDE	ELEVATION	DATE EST.	DATE CLD.	OWNERSHIP
# 261 K E L	Stubchaer res.	34° 27' 30"	119° 48' 27"	125	1/1970		S.B.C.F.C.D.
# 262 T A J	Tajiguas Dump	34° 29' 00"	120° 07' 45"	140	3/1973		S.B.C.F.C.D.
# 263 D Q U	Doulton Tun.-Fischer	34° 27'	119° 30'	1930	10/1971		S.B.C.F.C.D.
# 264 R O M	Romero Saddle	34° 28' 50"	119° 34' 28"	2800	9/1966	11/1973	U.S.F.S.
# 265 L O P	Los Prietos R.S.	34° 33' 38"	119° 47' 27"	1000	12/1971		U.S.F.S.
# 266 C A M	Upper Camuesa Creek	34° 34' 12"	119° 42' 42"	2240	12/1968	12/1975	U.S.F.S.
# 267 I N D	Indian Creek	34° 32' 32"	119° 38' 29"	1520	9/1967	1/1978	U.S.F.S.
# 268 B L C	Bluff Camp	34° 40' 19"	119° 39' 44"	4360	10/1966		U.S.F.S.
# 269 J U C	Juncal	34° 29' 23"	119° 28' 32"	2420	11/1966	11/1973	U.S.F.S.
# 270 P E N	Pendola R.S.	34° 30' 37"	119° 34' 30"	1660	1/1967		U.S.F.S.
# 271 O G R	Ogilvy Ranch	34° 34' 08"	119° 36' 49"	1760	10/1966	9/1971	U.S.F.S.
# 272 C A S	Casmalia	34° 50'	120° 32'	300	2/1968	4/1974	N.O.R.W.A.C.
# 273 L O M	Lompoc	34° 37'	120° 28'	320	2/1968		N.O.R.W.A.C.
# 274 L O O	Los Olivos	34° 39'	120° 07'	780	2/1968	4/1974	N.O.R.W.A.C.
# 275 M D S	Midland School	34° 44'	120° 05'	1230	2/1968		N.O.R.W.A.C.
# 276 B G R	Bar-G.O. Ranch	34° 40'	120° 02'	450	2/1968	4/1974	N.O.R.W.A.C.
# 277 L J R	Lamar Johnston Ranch	34° 53'	119° 42'	2900	2/1968		N.O.R.W.A.C.
# 278 C S G	Cachuma Sad. Guard Sta.	34° 44'	119° 55'	3040	2/1968	4/1974	N.O.R.W.A.C.
# 279 S C C	Santa Cruz Creek	34° 38'	119° 52'	1140	1/1968	4/1974	N.O.R.W.A.C.
# 280 N B R	Nash Boulden Ranch	34° 33'	119° 52'	925	1/1968	4/1974	N.O.R.W.A.C.

SANTA BARBARA COUNTY RECORDING RAINGAGE STATIONS

STATION NO. # I.D.	STATION NAME	LATITUDE	LONGITUDE	ELEVATION	DATE EST.	DATE CLD.	OWNERSHIP
# 281 H H S	Happy Hollow Guard Sta.	34°36'	119°45'	3880	2/1968	4/1974	N.O.R.W.A.C.
# 282 G O C	Getty Oil Co.-Gaviota	34°29'	120°12'	175	11/1969	4/1974	N.O.R.W.A.C.
# 283 C O R	Cooper Ranch	34°37'	120°20'	220	11/1970	4/1974	N.O.R.W.A.C.
# 284 G O R	Goodchild Ranch	34°53'	120°08'	860	11/1970	4/1974	N.O.R.W.A.C.
# 285 V A N	Vandenberg A.F.B.	34°39'	120°36'	220	12/1970	4/1974	N.O.R.W.A.C.
# 286 D T R	Diamond T. Ranch	34°47'	120°10'	1000	11/1971	4/1974	N.O.R.W.A.C.
# 287 O T A	Ota Ranch	34°23'	119°28'	400	11/1971	4/1974	N.O.R.W.A.C.
# 288 G U A	Guadalupe	35°00'	120°34'	60	1/1973	4/1974	N.O.R.W.A.C.
# 289 R I R	Rinconada Ranch	35°05'	120°03'	1950	2/1970	4/1974	N.O.R.W.A.C.
# 290 B A R	Barca Ranch	34°46'	120°26'	310	11/1969	4/1974	N.O.R.W.A.C.
# 291 A D R	Adams Ranch	35°01'	120°12'	1000	11/1969	4/1974	N.O.R.W.A.C.
# 292 M P K	McPherson Peak	34°53'	119°49'	5747	11/1970	4/1974	N.O.R.W.A.C.
# 293 R I V	Riviera Park	34°26'22"	119°42'18"	525	12/1973	4/1974	S.B.C.F.C.D.
# 294 L C H	Lompoc Court House	34°38'30"	120°27'20"	100	12/1977		S. B. C. F. C. D.
# 295 C F S	New Cuyama Fire Station	34°56'05"	119°36'37"	2275	11/1978		S. B. C. F. C. D.
# 296 C H U	Chuchupate Ranger Station	34°48'30"	119°00'40"	5260	1941		U. S. W. B.
# 297 M C A	Matilija Canyon Ventura	34°30'14"	119°21'17"	1400	7/1960		V. C. F. C. D.
# 298 W H E	Wheeler Canyon Ventura	34°23'27"	119°08'42"	900	1965		V. C. F. C. D.
# 299 L K C	Lake Casitas Ventura	34°24'55"	119°20'12"	600	1960		V. C. F. C. D.

SANTA BARBARA COUNTY RECORDING RAINGAGE STATIONS

STATION NO. & I.D.	STATION NAME	LATITUDE	LONGITUDE	ELEVATION	DATE EST.	DATE CLD.	OWNERSHIP
# 503 O R P	Orcutt Recharge Project	34°55'53"		194'	1984		S.B.C.F.C.D.
# 513 T W I	Twitchell Dam	34°59'01"		740'	1984		S.B.C.F.C.D.
# 515 B L D	Bald Mountain	35°09'37"		1500'	1984		S.B.C.F.C.D.
# 517 S H E	Shell Peak	35°04'40"		2080'	1984		S.B.C.F.C.D.
# 519 B R A	Branch Mountain	35°11'06"		3770'	1984		S.B.C.F.C.D.
# 521 C U Y	Cuyama Fire Station	34°56'05"		2275'	1984		S.B.C.F.C.D.
# 523 A P C	Apache Canyon	34°46'27"		4410'	1984		S.B.C.F.C.D.
# 527 L A L	Los Alamos	34°44'01"		800'	1984		S.B.C.F.C.D.
# 529 S I S	Sisquoc River	34°53'38"		354'	1984		S.B.C.F.C.D.
# 531 L O M	Santa Ynez River	34°38'30"		110'	1984		S.B.C.F.C.D.
# 541 S C I	Santa Cruz Island	33°59'39"		1270'			S.B.C.F.C.D.
# 545 F C D	Flood Control Office	34°25'30"		80'	1985		S.B.C.F.C.D.
# 547 M C R	Mission Creek	34°28'14"		2400'	1985		S.B.C.F.C.D.

SANTA BARBARA COUNTY RECORDING RAINGAGE STATIONS

STATION NO. & I.D.	STATION NAME	LATITUDE	LONGITUDE	ELEVATION	DATE EST.	DATE CLD.	OWNERSHIP
# 181	Deliberately left blank						
# 182							
# 183							
# 184							
# 185							
# 186							
# 187							
# 188							
# 189							
# 190							
# 191							
# 192							
# 193							
# 194							
# 195							
# 196							
# 197							
# 198 O R O	Orcutt Road Yard	34°52'56"	120°26'55"	280'	11/1978		S.B.C.F.C.D.
# 199 W D R	Wood Residence	34°31'23"	119°43'06"	250'	1983		S.B.C.F.C.D.
# 200							

Deliberately left blank

SANTA BARBARA COUNTY RECORDING RAINGAGE STATIONS

STATION NO. & I.D.	STATION NAME	LATITUDE	LONGITUDE	ELEVATION	DATE EST.	DATE CLD.	OWNERSHIP
# 70 W B P	West Big Pine	34°41'26"	119°39'52"	6360'	1982		S.B.C.F.C.D.
# 71 G I B	Gibraltar	34°41'26"	119°40'54"	1550'	1982		S.B.C.F.C.D.
# 72 C A C	Cachuma Dam	34°34'47"	119°58'39"	840'	1981		S.B.C.F.C.D.
# 73 F I G	Figueroa Mountain	34°45'05"	120°00'26"	3200'	1981		S.B.C.F.C.D.
# 74 B U E	Ruellton Maintenance Yard	34°37'18"	120°11'32"	530'	1981		S.B.C.F.C.D.
# 75 C A S	Casmalia	34°49'10"	120°31'53"	760'	1983		S.B.C.F.C.D.
# 76 B A T	Bates Bridge	34°55'25"	119°55'00"	5120'	1983		S.B.C.F.C.D.
# 77 M N T	Manzanita Mountain	34°53'38"	120°04'54"	3193'	1983		S.B.C.F.C.D.
# 78 S M P	San Marcos Pass	34°30'36"	119°49'14"	2300'	1984		S.B.C.F.C.D.
# 79 J U N	Juncal Dam	34°29'31"	119°30'25"	2200'	1984		S.B.C.F.C.D.
# 80 S B P	Santa Barbara Portrero	34°46'14"	119°39'07"	5300'	1982		S.B.C.F.C.D.

NON-RECORDING RAINGAGE STATION NUMERICAL INDEX

STATION NO. & I.D.	STATION NAME & ADDRESS	LAT.	LONG.	ELEV.	EST'D	CL'D
# 301 G A V	Gaviota Beach State Park Ph: Dial "0", ask for Gaviota Toll Station #5 Address: Gaviota Area, Rt. 1, Box 238 Goleta 93017.	34°28'	120°14'	40	9/1963	
# 302 N J Q	Nojoqui Falls Park	34°32'	120°11'	720	1963	8/1965
# 303 R E F	Refugio Beach County Park Ph: Bill Wratten, 968-1411 Address: Gaviota Area, Rt. 1, Box 238, Goleta 93017.	34°28'	120°04'	10	10/1963	2/1981
# 304 E C B	El Capitan State Beach Ph: Bill Wratten, 968-1411 Address: Gaviota area, Rt. 1, Box 238 Goleta 93017.	34°28'	120°01'	30	4/1965	2/1981
# 305 D M R	Demery Residence 1895 View Drive, Santa Ynez, CA 93463	34°38'21"	120°01'46"	825'	9/1984	
# 306 T V P	T.V. Peak U.S.W.B. #7909	34°32'	119°57'	4000	9/1954	1/1974
# 307 D O S	Dos Pueblos Ranch Ph: 968-1116, 968-1642, 968-7546	34°29'	119°57'	600	11/1926	1952
# 308 D O P	Dos Pueblos Ranch at R.R. - Rt. 1, Box 238 Goleta 93017. Ph: 968-1116, 968-1642, 968-7546	34°26'	119°58'	70	1945	
# 309 G A N	Glen Annie Canyon O. Hove, Rt. 1, Box 293, Goleta, CA 93017. Ph: 968-2872	34°29'	119°53'	410	1963	
# 310 G L C	Sta Barbara Lemon Association Sta Barbara Lemon Assoc., La Patera Lne., Goleta Ph: Mr. Shamel, 967-2355, POB 577, Goleta 93017	34°26'	119°50'	35	9/1936	
# 311 S B A	Santa Barbara Airport U.S.W.B. #7905	34°26'	119°50'	9	9/1941	

312

Revised 4/26/1985

STATION NO. & I.D. NON-RECORDING RAINGAGE STATION NUMERICAL INDEX
STATION NAME & ADDRESS LAT. LONG. ELEV. EST'D CL'D

313

314 L P R Los Prietos Ranger Station
U.S.W.B. #5147
Ph: 967-3481. Mailing: Star Rt., S.B. 93105.

315 A T A 4569 Atascadero, Goleta
Contact Mary Pinoli of S.B.F.C. for information

316 G O B Goleta State Beach
Floyd Campbell, 5986 Sandspit Rd., Goleta 93017
Ph: 967-1300

317

318 C W T Cater Water Treatment - 1150 San Roque Rd. SB 93105.
Ph: City Water Dept., 687-5361

319 G I D Gibraltar Dam
U.S.W.B. #3402
Ph: S.B. Water Dept., Clare Steward, 682-4451

320 S O P Santa Barbara Water Department
South Portal, Mission Tunnel

321 B O T Santa Barbara Botanic Garden
1212 Mission Canyon Road, Santa Barbara 93105.
Ph: D.E. Emery, 682-4726

322 H I L 1750 Hillcrest Road
Norman Caldwell, 1750 Hillcrest Road, Santa Barbara
Ph: 962-0357 93103.

323

324

STATION NO. & I.D.	STATION NAME & ADDRESS	LAT.	LONG.	ELEV.	EST'D	CL'D
# 325 M W G	Montecito Water Company 583 San Ysidro Dr., Santa Barbara 93108. Ph: Montecito Water District, 969-2271	34°26'	119°38'	250	1924	
# 326 P I C	Pine Canyon Ph: Bob Blecker, U.S.F.S., 683-6711 U.S.W.B. #6890	35°02'	120°12'	835	3/1938	
# 327						
# 328 S W D	Summerland Water District 2450 Lilley Avenue, Summerland, CA P. O. Box 346	34°25'	119°34'	75	10/1983	
# 329						
# 330 P E F	Pendola Fire Station U.S.W.B. #6791 Ph: Los Prietos R.S., 967-3481	34°31'	119°34'	1622	1/1939	
# 331 J C L	Juncal U.S.W.B. #4422 Ph: Doris Barrow, Montecito Water District, 969-1318	34°29'	119°31'	2060	2/1925	
# 332 C A D	Cachuma Dam U.S.W.B. #1253 Ph: Don Boyd, U.S.B.R., 688-4612	34°35'	119°59'	781	10/1951	
# 333 C A P	Carpinteria Post Office	34°24'	119°31'	40	1939	1975
# 334 G W D	Goleta Valley Water District 4699 Hollister Ave., Goleta 93017 Ph: Williams, 967-2357	34°26'	119°48'	50	9/1954	
# 335 S B H	Santa Barbara State Highway Maintenance Office 3999 State St., Santa Barbara 93105. Ph: 967-5656	34°26'	119°45'	160	9/1954	

STATION NO. & I.D.	STATION NAME & ADDRESS	LAT.	LONG.	ELEV.	EST'D	CL'D
# 336 T M S	T.M. Storke Ranch Ph: Ragnel Sundsten (former manager), Solvang, 688-6890	34°33'	119°55'	880	9/1943	6/1974
# 337 L A U	Mr. Raquel Sunsten, 1711 Laurel Ave. Solvang, CA 93463. Ph: 688-6890	35°36'	120°08'	530	1974	
# 338 L C W	La Cumbre Mutual Water Company 695 Via Tranquilla, Goleta 93110 Ph: Mr. Dean or Mr. Olson, 967-2376	34°26'	119°46'	240	9/1933	
# 339 S B W	Santa Barbara - U.S.W.B. U.S.W.B. #7902	34°25'	119°41'	5	1867	
# 340 D O S	Doulton Tunnel South Portal Ph: Montecito Water District, 969-2271	34°27'	119°33'	1950	9/1925	
# 341 E N G	County Engineering Building 123 E. Anapamu St., Santa Barbara Ph: 966-1611, Ext. 264 or 265	34°25'	119°42'	100	1962	
# 342 P H I	Philips Residence 847 La Milpita Road, Santa Barbara 93105 Ph: R.M. Philips, 687-1464	34°27'04"	119°45'23"	300	2/1965	
# 343						
# 344						
# 345						
# 346 V H U	4660 Via Huerto Mr. & Mrs. Dan Grant, 4660 Via Huerto, Goleta 93017. Ph: 967-3619	34°25'	119°47'	200	9/1955	

STATION NO. & I.D.	STATION NAME & ADDRESS	LAT.	LONG.	ELEV.	EST'D	CL'D
# 347						
# 348 R R R	Rice Ranch Road Orcutt	34°52'	120°26'	440	8/1963	1969
# 349 A L M	Almar Ranch Ph: Manfred Sanders, 937-2772	34°51'	120°22'	900	1963	
# 350 S Y N	Santa Ynez Fire Station Ph: S.B.C. Fire Dept., 688-6481	34°36'46"	120°05'05"	600	1950	
# 351 L A F	Los Alamos Fire Station U.S.W.B. #5107 Ph: Dial "0", ask for 2251	34°44'	120°17'	580	1909	
# 352 P U R	Puritan Ice Company Barbara Chapman, Puritan Ice, 151 Obispo St., Guadalupe, CA 93434. Ph: 1-343-1514	34°57'30"	120°34'	80	1920	
# 353						
# 354 S U E	Suey Ranch U.S.W.B. #8627	35°00'	120°23'	390	1909	6/1977
# 355 N I P	Nipomo U.S.W.B. #6207	35°04'	120°30'	360	1920	6/1977
# 356 T W I	Twitchell Dam U.S.W.B. #9111 Ph: Wilbur Knott, 925-8989	34°59'	120°19'	582	1961	
# 357 S A M	Santa Maria Airport U.S.W.B. #7946 Ph: Clayton Call, 925-0246	34°54'	120°27'	254	1940	

STATION NO. & I.D.	STATION NAME & ADDRESS	LAT.	LONG.	ELEV.	EST'D	CL'D
# 358 S L O	San Luis Obispo Poly U.S.W.B. #7851	35°18'	120°40'	315	1869	
# 359 A R G	Point Arguello U.S.W.B. #7016	34°35'	120°39'	76	1941	
# 360 C U A	Old Cuyama U.S.W.B. #2236	34°56'	119°37'	2255	1937	12/1973
# 361 S R F	Surf U.S.W.B. #8697	34°41.6'	120°35'	50	1943	
# 362						
# 363 L Z S	La Zaca - San Antonio Divide U.S.W.B. #4858	34°42'	120°11'	970	12/1941	2/1958
# 364 S A S	San Antonio - Santa Maria U.S.W.B. #7713	34°49'	120°21'	1000	12/1941	
# 365 S Y L	Santa Ynez Lookout U.S.W.B. #7982	34°32'	119°59'	4290	12/1942	11/1953
# 366 T U C	Tuckers Grove Park 805 San Antonio Creek Road, Santa Barbara 93111 Ph: Bob Ruiz, 967-1112	34°27'	119°47'	160	1/1965	
# 367						
# 368 S E R	3175 Serena 3175 Serena Ave., Montecito, CA	34°25'	119°34'	50	3/1965	10/1973
# 369 S N M	San Marcos Ranch U.S.W.B. #7861 (to 1960) Mr. and Mrs. Laurence Broster, San Marcos Ranch, Box C, Santa Barbara. Ph: 964-4944 93105	34°33'	119°52'	800	10/1951	

STATION NO. & I.D.	STATION NAME & ADDRESS	LAT.	LONG.	ELEV.	EST'D	CL'D
# 370						
# 371						
# 372 T U O	7209 Tuolumne Carl Chappell, 7209 Tuolumne Dr., Goleta	34°26'	119°53'	80	10/1963	3/1969
# 373						
# 374 A S H	815 Ashley Rd. 815 Ashley Rd., Santa Barbara 93108 Ph: Richard J. Latham, 969-3885	34°27'	119°37'	500	1959	
# 375 J O H	Johns Manville Plant Eldon J. Lomnes, Mining Geologist, Johns-Manville Sales Corp., 2500 Miguelito Rd., Lompoc 93436. Ph: (805) 736-1221	34°36'	120°27'	500	1922	
# 376 G A C	Glen Annie Canyon David Giorgi, 955 Glen Annie Rd., Goleta 93017 Ph: 968-2967	34°27'	119°52'	120	3/1965	
# 377						
# 378 B I R	Bishop Ranch Andrew G. Brydon, Corona Del Mar Ranch, Goleta 93017 Ph: 968-2616	34°27'	119°52'	100	1/1941	
# 379 B A C	Bartlett Canyon Corona Del Mar Ranch, Attn. Mr. Brydon Ph: 968-2616	34°28'	119°52'	160	7/1976	

STATION NO. & I.D.	STATION NAME & ADDRESS	LAT.	LONG.	ELEV.	EST'D	CL'D
# 380 S M C	Santa Maria City U.S.W.B. #7940 (to 1941) John Zusan, Assistant Civil Engineer, 110 E. Cook St., Santa Maria 93454. Ph: 925-0951 ext. 284.	34°57'	120°26'	224	1885	
# 381 L O W	Lompoc Water Treatment Plant 601 East North Avenue, Lompoc, CA. 93436	34°39'13"	120°26'54"	95	07/1950	
# 382 L O F	Lompoc Flood Control Shop 1016 E. Lemon, Lompoc - Stan Hollister	34°39'30"	120°28'	100	11/1965	1971
# 383 C P R	5805 Casitas Pass Road Bill Catlin, 5805 Casitas Pass Rd., Carpinteria 93013 Ph: 684-3156	34°25'18"	119°29'59"	95	1948	
# 384 B H M	Buellton State Highway Maintenance Yard Ph: Foreman, 688-6649. Obtain data: Caltrans, 3999 State St., S.B.	34°37'	120°12'	360	1937	
# 385 L H M	Lompoc State Highway Maintenance Yard Near Airport P. O. Box 252, Lompoc, CA 93436	34°39'47"	120°28'26"	100	1937	
# 386 P I N	Pine Crest Station Robert L. Lawson, 1501 Mission Canyon Rd., S.B. 93105	34°27'49"	119°42'27"	970	1897	08/1979
# 387 B E T	Union Sugar Company Marilyn M. Stanley, Union Sugar, 2820 W. Betteravia Rd., Santa Maria 93454. Ph: 925-8633.	34°55'	120°31'	160	1897	
# 388 W H I	White House Residence K.M. WhiteHouse, 1422 San Miguel Ave., S.B. 93109 Ph: 965-3114	34°24'	119°43'	200	9/1965	
# 389 R S J	Rancho San Julian Mr. Russel Ph: 736-5911 or 736-5097.	34°32'	120°20'	600	1879	

STATION NO. & I.D.	STATION NAME & ADDRESS	LAT.	LONG.	ELEV.	EST'D	CL'D
# 390 S M P	Summit, San Marcos Pass	34°31'	119°49'	2200	1898	2/1943
# 391 A L I	Alisal Ranch Ph: Mr. Monson, 688-6411	34°34'	120°08'	470	9/1965	
# 392	Alisal Guest Ranch, P.O. Box 26, Solvang 93463.					
# 393 S O L	Solvang Water District Ph: Solvang Municipal Improvement District, 688-5575 Solvang Improvement District, POB 107, Solvang 93463.	35°35'45"	120°08'20"	496	1964	
# 394						
# 395 T R C	San Marcos Trout Club Ph: 964-4194.	34°29'	119°48'	1200	1945	
# 396 P A I	Painted Cave Road R.H. Eldridge, 2620 Painted Cave Rd., S.B. Ph: 964-2375	34°30'	119°47'	2400	11/1966	
# 397 N E W	New Horizons 250 Moreton Bay Lane, Goleta	34°27'	119°50'	40	9/1966	1974
# 398 S A L	Salsipuedes Gaging Station U.S.W.B. #7661	34°35'	120°24'	250	1941	
# 399 O Z A	Ozena U.S.W.B. #6576 (to 1975) Bill Minger or John Singer, Ventura County Center, 800 S. Victoria, Ventura 93009. Ph: (805) 654-2015.	34° 41'30"	119°19'	3705	9/1904	
# 400 S M H	Santa Maria State Highway Maintenance Yard 125 E. Boone St., Santa Maria 93454 Ph: 922-1987	34°57'	120°26'	220	1954	

STATION NO. & I.D.	STATION NAME & ADDRESS	LAT.	LONG.	FLYV.	EST'D	CL'D
# 401 L A P	La Patera Rancho Garrett Van Horne, 6400 Cathedral Oaks Rd, Goleta Ph: 967-6248	34°27'	119°51'	80	1941	
# 402 C U N	New Cuyama Highway Maintenance Ph: 766-2215	34°57'	119°41'	2140	1954	
# 403 B U C	Buckhorn CalTrans	35°01'	120°12'	850	11/1954	2/1963
# 404 P A T	Pattway U.S.W.B. #6754	34°56'	119°23'	3868	1915	
# 405 B S C	Burpee Seed Company Floradale Rd., Lompoc P.O. Box 546, Lompoc 93438. Ph: 736-4110.	34°39'05"	120°29'32"	70	1913	
# 406 U O R	Union Oil Company, Orcutt Harvey Elder, Union Oil, 201 S. Broadway, Orcutt 93454 Ph: 937-6376	34°52'	120°27'	340	1946	
# 407 U G U	Union Oil Company, Guadalupe Ph: Don Hoover, 343-1176. For area office, see #406.	34°59'	120°38'	40	1957	
# 408 U C A	Union Oil Company, Cat Canyon Ph: Jimmy Forester, 733-4442. Area office: see #406.	34°48'	120°16'	1400	1950	
# 409 U O H	Union Oil Company, Orcutt Hill Ph: Bob Huguenard, 937-2576. Area office: see #406.	34°51'	120°27'	720	1959	
# 410 U B A	Union Oil Company, Battles Plant Ph: Paul Blake, 935-4262. Area Office; see #406.	34°56'	120°24'	255	1952	
# 411 U L O	Union Oil Company, Lompoc Ph: Jimmy Forester, 733-4442. Area office; see #406.	34°44'	120°25'	1200	1966	

STATION NO. & I.D.	STATION NAME & ADDRESS	LAT.	LONG.	ELEV.	EST'D	CL'D
# 413 G O O	Goodchild Ranch Bob Goodchild, POB 1278, Santa Maria, CA 93454.	34°53'	120°07.6'	900	9/1966	
# 414						
# 415 S I R	Sisquoc Ranch Rancho Sisquoc, Santa Maria Office, Rt. 1, Box 147, Santa Maria. Ph: Harold Pfeiffer, 927-3616.	34°51'	120°13'	600	1904	
# 416 T E P	Tepusquet Canyon Road Mrs. V. E. Smith, Route 1, Box 130 Santa Maria, CA 93454	34°54'56"	120°13'26"	840	1945	
# 417 S J R	San Julian Road Frank Beggs	34°35'	120°25'	160	11/1915	1967
# 418 F G L	Figueroa Mountain Lookout U.S.W.B. #3045 U.S.F.S. District Office, 6144 Calle Real, Goleta Ph: Bob Blecker, 683-6711	34°45'	119°59'	4480	10/1946	1976
# 419 F G M	Figueroa Mountain Near Midland School U.S.B.R.	34°44'	120°05'	1198	1957	9/1976
# 420 J A R	Jalama Ranch	34°31'	120°27'30"	440	1940	12/1971
# 421 F G G	Figueroa Mountain Guard Station U.S.W.B. #3048 U.S.F.S., 6144 Calle Real, Goleta. Ph: 683-6711 Figueroa Guard Station: 688-3017.	34°44'	120°00'	3200	3/1942	
# 422 S Y R	Santa Ynez Road Yard County Road Yard, Airport Road, Santa Ynez. Ph: Agnelli, 688-6619.	34°36'	120°04'	654	1967	

STATION NO. & I.D.	STATION NAME & ADDRESS	LAT.	LONG.	ELEV.	EST'D	CL'D
# 423						
# 424 S J D	Salsipuedes Jalama Divide U.S.W.B. #7684	34°32'	120°23'	1150	1941	12/1951
# 425 S M S	San Marcos Summit R.S. Tenney, San Marcos Pass Rd., Santa Barbara. 93105 Ph: 967-4957	34°30'	119°49'	2000	1941	
# 426 B A L	Ballard Divelbiss	34°38'	120°07'	640	1967	1970
# 427 O R C	Orcutt 335-A W. Clark, Orcutt. Ph: Darrel Larsen, 937-6703.	34°52'	120°27'	300	11/1967	
# 428 R F L	Refugio Pass - Lower Gage Ph: Refugio Pass Fire Suppression Station, 688-6793.	34°30'	120°04'	400	1957	1976
# 429 R F U	Refugio Pass-- Upper Gage Ph: Refugio Pass Fire Suppression Station, 688-6793.	34°32'	120°04'	2254	1957	3/1975
# 430 M I G	Miguelito Canyon/Frick Springs Ph: Lompoc City Water Dept., 736-1261 (Al Thompson, Supt. ext 271; Jim Lewis ext. 249). 119 W. Walnut 93438.	34°34'43"	120°29'42"	1080	1945	
# 431 S C I	Santa Cruz Island				1904	
# 432 S T O	Stow Grove Mr./Mrs. Harley C. Hastings, 580 La Patera Ln, Goleta 93017. Ph: 964-2311.	34°27'	119°51'	100	12/1968	
# 433 G M R	Graham Ranch Joseph M. Graham, 821 W. Arrellaga St., Sta Barb. 93101 Ph: 962-6756	34°29'30"	119°41'45"	3300	1947	

STATION NO. & I.D.	STATION NAME & ADDRESS	LAT.	LONG.	ELEV.	EST'D	CL'D
# 434						
# 435						
# 436 C U S	New Cuyama Station #41 U.S.W.B. #6154 County Fire Station #41, POB 261, New Cuyama 93254 Ph: S.B.C. Fire Dept., 766-2489.	34°57'	119°41'	2160	12/1973	
# 437 C A L	Casitas Lake D.D.Taylor, Ventura County Center 800 S. Victoria, Ventura 93009. Ph: (805) 654-2015	34°24'55"	119°20'12"	592	1960	
# 438 P T C	Point Conception U.S.A.F.				1945	8/1972
# 439 L O S	Lompoc Flood Control Shop, Airport Ph: Stan Hollister, 736-8215	34°40'02"	120°28'02"	100	1971	
# 440						
# 441						
# 442 M U R	Murietta Divide D.D.Taylor, Ventura County Center 800 S. Victoria, Ventura 93009. Ph: (805) 654-2015	34°29'24"	119°25'56"	3370	1959	
# 443 O G I	Ogilvy Ranch U.S.F.S., 6144 Calle Real, Goleta. Ph: 683-6711 Los Priostos Ranger Satation: 967-3481	34°34'08"	119°36'49"	1760	1971	12/1977

STATION NO. & I.D.	STATION NAME & ADDRESS	LAT.	LONG.	ELEV.	EST'D	CL'D
# 444 M O N	Monte Arido U.S.F.S., 3144 Calle Real, Goleta. Ph: 683-6711 Los Prietos Ranger Station: 967-3481.	34°32'20"	119°28'	5450	11/1971	1978
# 445 C A U	Upper Camuesa U.S.F.S., 6144 Calle Real, Goleta. Ph: 683-6711 Los Prietos Ranger Station: 967-3481.	34°35'20"	119°43'	2240	1971	1974
# 446 L P I	Little Pine U.S.F.S., 6144 Calle Real, Goleta. Ph: 683-6711 Los Prietos Ranger Station: 967-3481	34°36'	119°44'	4260	11/1971	3/1976
# 447 L I P	Little Pine 4NE U.S.F.S., 6144 Calle Real, Goleta. Ph: 683-6711 Los Prietos Ranger Station: 967-3481	34°39'	119°42'30"	4660	11/1971	12/1977
# 448 L O M	Loma Pelona Peak U.S.F.S., 6144 Calle Real, Goleta. Ph: 683-6711 Los Prietos Ranger Station: 967-3481	34°38'37"	119°37'	4453	1971	12/1977
# 449 O R T	Ortega Hill D.D.Taylor, Ventura County Center 800 S. Victoria, Ventura 93009. Ph: (805) 654-2015	34°34'27"	119°21'37"	5100	1957	
# 450 W B P	West Big Pine U.S.W.B. #9532 (to 9/1976) - now S.B.C.F.C.D.	34°42'	119°40'	6280	12/1942	
# 451 D O N	Don Victor U.S.F.S., 6144 Calle Real, Goleta. Ph: 683-6711 Los Prietos Ranger Station: 967-3481	34°39'20"	119°31'	3500	1971	12/1977
# 452 R O S	Romero Saddle U.S.F.S., 6144 Calle Real, Goleta. Ph: 683-6711 Los Prietos Ranger Station: 967-3481	34°28'50"	119°34'28"	2800	1971	12/1977
# 453 M O O	Noon Peak U.S.F.S., 6144 Calle Real, Goleta. Ph: 683-6711 Los Prietos Ranger Station: 967-3481	34°28'	119°28'30"	3740	12/1972	12/1977

STATION NO. & I.D.	STATION NAME & ADDRESS	LAT.	LONG.	HELV.	EST'D	CL'D
# 454 H I P	Hildreth Peak U.S.F.S., 6144 Calle Real, Goleta. Ph. 683-6711 Los Prietos Ranger Station: 967-3481	34°36'40"	119°30'	5023	1971	1978
# 455 A L S	Alamar Saddle U.S.F.S., 6144 Calle Real, Goleta. Ph. 683-6711 Los Prietos Ranger Station: 967-3481	34°42'	119°38'	6000	1971	1978
# 456 B A T	Bates Ridge U.S.W.B. #0543 (until 1976) - now S.B.C.F.C.D.	34°55'	119°55'	5300	11/1949	
# 457 T E K	Tepusquet Peak S.B.C.F.C.D.	34°54'35"	120°11'	3253	9/1967	
# 458 L A Z	La Zaca Foxen Divide U.S.W.B. #4855 (closed 1958)	34°46'	120°07'	1470	12/1941	2/1958
# 459 M R E	Marre Ranch U.S.W.B. #5356	34°41'	119°59'	1450	12/1941	6/1957
# 460 P O T	Potrero Seco D.D. Taylor, Ventura County Center 800 S. Victoria, Ventura 93009. Ph. (805) 654-2015	34°37'57"	119°25'04"	4750	1974	
# 461 A P A	Apache Canyon D.D. Taylor, Ventura County Center 800 S. Victoria, Ventura 93009. Ph. (805) 654-2015	34°46'53"	119°20'21"	3950	1972	
# 462 L O C	Lockwood-Ozena D.D. Taylor, Ventura County Center 800 S. Victoria, Ventura 93009. Ph. (805) 654-2015	34°43'27"	119°10'58"	4800	1960	
# 463 M A T	Matilija Dam D.D. Taylor, Ventura County Center 800 S. Victoria, Ventura 93009. Ph. (805) 654-2015	34°29'02"	119°18'17"	1060	1948	

STATION NO. & I.D.	STATION NAME & ADDRESS	LAT.	LONG.	ELEV.	EST'D	CL'D
# 464						
# 465 M A C	Matilija Canyon D.D.Taylor, Ventura County Center 800 S.Victoria, Ventura 93009. Ph: (805) 654-2015	34°30'14"	119°21'17"	1400	1961	
# 466 O Z G	Ozena Guard Station D.D.Taylor, Ventura County Center 800 S.Victoria, Ventura 93009. Ph: (805) 654-2015	34°40'57"	119°21'08"	3600	1972	
# 467 P I M	Pine Mountain Inn U.S.W.B. #6910 D.D.Taylor, Ventura County Center 800 S.Victoria, Ventura 93009. Ph: (805) 654-2015	34°36'34"	119°21'52"	4200	1965	
# 468 P M T	Pine Mountain D.D.Taylor, Ventura County Center 800 S.Victoria, Ventura 93009. Ph: (805) 654-2015	34°38'22"	119°19'22"	6740	1957	
# 469 S A V	Santa Ana Valley - Selby Ranch D.D.Taylor, Ventura County Center 800 S.Victoria, Ventura 93009. Ph: (805) 654-2015	34°25'29"	119°21'15"	660	1927	
# 470 H A R	Harris Gaging Station U.S.W.B. #3787	34°46'	120°25'	320	1954	12/1964
# 471 C M L	Camuesa Lookout U.S.W.B. #1473	34°33'	119°41'	3200	12/1942	2/1950
# 472 S C C	Santa Cruz Creek U.S.W.B. #7919	34°35'	119°56'	675	11/1941	7/1953

SANTA BARBARA COUNTY NON-RECORDING RAINGAGE STATIONS

STATION NO. & I.D. STATION NAME LATITUDE LONGITUDE ELEVATION DATE EST. DATE CLD. OWNERSHIP

473 C A D Camalia Dump 34°51'34" 120°32'36" 458' 4/1980

Clifford Ivey
Camalia Resources
P. O. Box E
Camalia, CA 93429
(805) 937-7544

474 D D R Doerner Residence 34°23'59" 119°43'22" 75' 9/1981

114 La Marina Drive
Santa Barbara, CA 93109
(805) 965-8276

475 R H S Stern Residence 34°26' 119°46'45" 53.8' 11/1982

394 Arroyo Road
Goleta, CA 93110

476 R P M Rancho Punta Del Monte 34°25'35" 119°33'48" 240' 2/1983

3150 Foothill Road
Carpinteria, CA 93013

477 C A R Carrari Vineyard 34°44'19" 120°14'41" 680' 2/1985

Joe Carrari
P. O. Box 556
(439 Waite St.)
Los Alamos, CA 93440
(805) 344-4000

478 A C R Alisos Canyon Ranch 34°44'58" 120°12'09" 760' 2/1985

Mrs. Louise Munoz
P.O. Box 6
Los Alamos, CA 93440

479

4. Precipitation gages, Ventura County, with cross reference and location map. Courtesy of Dolores Taylor, Ventura County Flood Control and Water Resources District.

TABLE II-1 PRECIPITATION STATIONS
ALPHABETICAL INDEX

VENTURA COUNTY

STATION NAME	STATION NUMBER	EQUIP TYPE	LATITUDE	LONGITUDE	CAL-ZNS T. R. S.	ELEV	RECORD BEGAN	OBSERVER
ALAMO MOUNTAIN	211	ST	34 39'43"	118 58'16"	7N 20W 35	6650	1961	VCPCD
APACHE CANYON	240	ST	34 46'52"	119 20'20"	8N 23W 17	3950	1974	VCPCD
BARSDALE-YOUNG RANCH	96	S	34 21'50"	118 56'42"	3N 20W 11	400	1932	A. W. MOULTON
CAMARILLO-ADONE	194	R	34 12'18"	119 0'43"	1N 20W 6	130	1956	VCPCD
CAMARILLO-DAVIS RANCH	177	S	34 9'25"	119 4'41"	1N 21W 22	20	1957	J. G. MCCUNE
CAMARILLO-HAUSER	219	S	34 14'13"	119 1'34"	2N 21W 24	192	1965	DON HAUSER
CAMARILLO-SPRINGVILLE RANCH	3	S	34 12'18"	119 4' 5"	1N 21W 3	73	1903	RALPH LEONARDO
CANADA LARGA	85	RS	34 22'52"	119 13'41"	4N 22W 31	760	1935	VCPCD
CASITAS DAM	4	S	34 22' 8"	119 19'48"	3N 23W 6	400	1928	CMWD PERSONNEL
CERRO NOROESTE	241	ST	34 53'20"	119 21'54"	9N 23W 5	4350	1974	VCPCD
CHANNEL ISLANDS HARBOR	215	S	34 9'36"	119 13'19"	1N 22W 19	5	1964	HARBOR PERSONNEL
CHIEF PEAK	179	ST	34 31' 5"	119 10'48"	5N 22W 16	5000	1958	VCPCD
COOPER CANYON (USBR)	255	RS	34 26'49"	119 19'19"	4N 23W 7	1120	1980	VCPCD
COV SPRINGS	178	ST	34 33'29"	118 54'11"	5N 19W 6	3550	1958	VCPCD
CUDDY VALLEY-CUDDY RANCH	244	S	34 50'24"	119 3'32"	9N 20W 30	5500	1975	CLEAVE F. CUDDY
EL RIO-COUNTY YARD	231	S	34 14'28"	119 10'37"	2N 22W 22	79	1967	VCPCD
EL RIO-UWCD SPREADING GROUNDS	239	S	34 14'28"	119 9' 4"	2N 22W 23	105	1973	UWCD PERSONNEL
FILLMORE-COUNTY FIRE STATION	199	S	34 24'14"	118 55'34"	4N 20W 25	435	1960	STATION PERSONNEL
FILLMORE-DOUBLE M RANCH	94	S	34 23'53"	118 50'49"	4N 19W 26	600	1932	FRED CARPENTER
FILLMORE-FISH HATCHERY	171	RS	34 23'38"	118 53' 2"	4N 19W 28	465	1957	VCPCD
FILLMORE-RANCHO SESPE	39	S	34 23' 2"	118 57'47"	4N 20W 34	360	1907	RANCH PERSONNEL
FILLMORE-SESPE WESTATES	224	RS	34 28'44"	118 52'52"	5N 19W 29	2840	1967	RICKY J. BENSON
HUNGRY VALLEY-MAXEY RANCH	251	ST	34 45'32"	118 54'54"	8N 19W 20	4650	1973	VCPCD
LAKE BARD	227	RS	34 14'31"	118 49'41"	2N 19W 24	1010	1967	JOHN T. RENSTROM
LAKE CASITAS-UPPER	204	RS	34 24'54"	119 20'13"	4N 23W 19	600	1960	CMWD PERSONNEL
LAKE SHERWOOD-COUNTY FIRE STATION	121	R	34 8'28"	118 52'30"	1N 19W 28	960	1935	STATION PERSONNEL
LAS LLAJAS CANYON	234	R	34 18' 4"	118 41'24"	3N 17W 32	1150	1969	VCPCD
LOCKWOOD VALLEY-COUNTY YARD	209	RS	34 44' 2"	119 6' 0"	8N 21W 33	5150	1961	BOB HUNTER
LOCKWOOD/OZENA-WAGON ROAD CAMP	202	ST	34 43'26"	119 10'59"	7N 22W 11	4800	1960	VCPCD
MATILIJIA CANYON	207	R	34 30'14"	119 21'18"	5N 24W 23	1400	1961	VCPCD
MATILIJIA DAM	134	S	34 29' 2"	119 18'18"	5N 23W 29	1060	1949	ROBERT MONNIER
MEINERS OAKS-COUNTY FIRE STATION	218	S	34 26'38"	119 17' 2"	4N 23W 10	730	1965	STATION PERSONNEL
MOORPARK-COUNTY FIRE STATION	141	S	34 17'13"	118 52'52"	2N 19W 4	525	1949	STATION PERSONNEL
MOORPARK-EVERETT	192	RS	34 15'22"	118 50'53"	2N 19W 14	635	1956	MONROE EVERETT
MOORPARK-HAPPY CAMP CANYON	250	R	34 20'46"	118 50'56"	3N 19W 15	1410	1978	VCPCD
MOORPARK-MERRIKEN	191	RS	34 19'34"	118 53'42"	3N 19W 20	1060	1956	GEORGE MERRIKEN
MOUNT PINOS	200	ST	34 48'40"	119 8'20"	8N 21W 6	8750	1960	VCPCD
MURIETTA DIVIDE	203	ST	34 29'24"	119 25'55"	5N 24W 30	3370	1960	VCPCD
MUTAU FLAT	181	ST	34 38'13"	119 2'46"	6N 20W 6	4850	1958	VCPCD
NEUBURY PARK-JENNY DRIVE	188	R	34 11' 6"	118 56'53"	1N 20W 11	665	1956	VCPCD
NEUBURY PARK-RANCHO SIERRA VISTA	182	S	34 9'11"	118 57'40"	1N 20W 22	810	1966	WALTER WATSON
OAK VIEW-COUNTY FIRE STATION	140	S	34 23'42"	119 18' 0"	4N 23W 28	520	1950	STATION PERSONNEL

TYPE: S - STANDARD NON-RECORDING GAGE

R - AUTOMATIC RECORDING GAGE

ST - STORAGE GAGE

PRECIPITATION STATIONS
ALPHABETICAL INDEX

STATION NAME	STATION NUMBER	EQUIP TYPE	LATITUDE	LONGITUDE	CAL-ZNS T. R. S.	ELEV	RECORD BEGAN	OBSERVER
OJAI-BARRETT RANCH	153	S	34 26'28"	119 13'19"	4N 22W 7	780	1952	CHARLES BARRETT
OJAI-COUNTY FIRE STATION	30	S	34 26'49"	119 14'35"	4N 23W 12	740	1906	STATION PERSONNEL
OJAI-STEWART CANYON	165	RS	34 27'40"	119 14'49"	4N 23W 1	960	1957	VCPCD
OJAI-THACHER SCHOOL	59	S	34 27'54"	119 10'48"	5N 22W 33	1440	1916	SCHOOL PERSONNEL
ORTEGA HILL	180	ST	34 34'26"	119 21'36"	6N 23W 31	5100	1958	VCPCD
OXNARD-AIRPORT	168	RS	34 12' 4"	119 12'29"	1N 22W 5	34	1957	VCPCD
OXNARD-VANCE	257	S	34 10'19"	119 11'31"	1N 22W 09	27	1980	MORT VANCE
OXNARD-WATER DEPARTMENT	32	S	34 12' 4"	119 10'41"	1N 22W 3	53	1875	CITY PERSONNEL
PIEDRA BLANCA GUARD STATION	152	RS	34 33'40"	119 9'58"	6N 22W 36	3065	1952	VCPCD
PINE MOUNTAIN	176	ST	34 38'20"	119 19'19"	6N 23W 4	6740	1958	VCPCD
PIRU CANYON	172	RS	34 30'47"	118 45'25"	5N 18W 15	1120	1957	UWCD PERSONNEL
PIRU-CAMULOS RANCH	101	RS	34 24'22"	118 45'22"	4N 18W 27	725	1929	RANCH PERSONNEL
PIRU-COUNTY FIRE STATION	36	S	34 24'47"	118 47'42"	4N 18W 20	700	1926	STATION PERSONNEL
PIRU-NEWMALL RANCH	25	S	34 24' 4"	118 43'23"	4N 18W 25	825	1913	RICHARD A. LYPPE
PIRU-TEMESCAL GUARD STATION	160	S	34 28'23"	118 45'22"	5N 18W 34	1080	1953	UWCD PERSONNEL
POINT HUGO-USN	223	S	34 7' 8"	119 6'25"	1S 21W 5	0	1946	U. S. NAVY
PORT HUENEME-USN	17	S	34 8'46"	119 12'18"	1N 22W 29	10	1891	CHUCK BULLOCK
POTRERO SECO	252	ST	34 37'55"	119 25' 5"	6N 24W 4	4750	1975	VCPCD
RANCHO MATILIJA-WEST	20	S	34 25'44"	119 18'47"	4N 23W 17	580	1926	RANCH PERSONNEL
SAN GUILLERMO	237	ST	34 39'25"	119 10' 5"	7N 22W 36	5125	1972	VCPCD
SANTA ANA VALLEY-SELBY RANCH	44	RS	34 25'30"	119 21'14"	4N 24W 13	660	1928	JACK SELBY
SANTA MONICA MOUNTAINS-DEALS FLAT	232	R	34 5'17"	118 58' 5"	1S 20W 15	1475	1969	VCPCD
SANTA PAULA CANYON-FERNDAL RANCH	173	RS	34 25'37"	119 5'10"	4N 21W 16	1010	1957	VCPCD
SANTA PAULA-AGRICULTURE OFFICE	19	S	34 21'14"	119 3'47"	3N 21W 10	282	1931	MR. LESLIE HAVORTH
SANTA PAULA-COUNTY FIRE STATION	210	S	34 20'49"	119 4'48"	3N 21W 16	263	1961	STATION PERSONNEL
SANTA PAULA-DAVES	243	S	34 20'35"	119 6'29"	3N 21W 17	325	1974	DONALD DAVES
SANTA PAULA-LIMONEIRA RANCH	18	S	34 19'55"	119 7'30"	3N 21W 19	295	1905	RANCH PERSONNEL
SANTA PAULA-UWCD	245	RS	34 20'42"	119 4'37"	3N 21W 15	250	1961	UWCD PERSONNEL
SANTA ROSA VALLEY-WORTHINGTON RANCH	49	S	34 14'53"	118 56'24"	2N 20W 24	445	1929	WILLIAM WORTHINGTON
SANTA SUSANA-AIRPORT	193	RS	34 16' 5"	118 42'32"	2N 17W 12	965	1956	VCPCD
SATICOY-COUNTY FIRE STATION	175	R	34 17'10"	119 9'18"	2N 22W 11	185	1957	STATION PERSONNEL
SEA CLIFF	221	RS	34 20'46"	119 25' 5"	3N 24W 17	20	1967	UWCD PERSONNEL
SIMI HILLS-BURRO FLAT	248	RS	34 14'42"	118 42'32"	2N 18W 25	1750	1977	JOE GLANTZ
SIMI-COUNTY FIRE STATION	154	S	34 17'38"	118 42'29"	3N 18W 36	1075	1948	STATION PERSONNEL
SOMIS-BARD	190	R	34 16'59"	119 0'25"	2N 20W 5	460	1956	VCPCD
SOMIS-DEBONI	189	R	34 17' 6"	119 4'19"	2N 21W 03	520	1956	JOHN DEBONI
SOMIS-FULLER	206	RS	34 18'40"	118 58'44"	3N 20W 28	730	1961	VCPCD
SOUTH MOUNTAIN-SHELL OIL	238	R	34 19'52"	119 0'29"	3N 20W 19	1630	1971	VCPCD
STATION CANYON (USBR)	254	RS	34 24'32"	119 22'12"	4N 24W 23	630	1980	VCPCD
SULPHUR MOUNTAIN-MEHER MOUNT	163	S	34 24'43"	119 10' 8"	4N 22W 22	2570	1957	AGNES BARON
SUSANA KNOLLS-COUNTY FIRE STATION	187	S	34 15'43"	118 40' 8"	2N 17W 16	1085	1956	STATION PERSONNEL
TAPO CANYON	196	R	34 19'34"	118 43' 5"	3N 18W 24	1390	1956	VCPCD

TYPE: S - STANDARD NON-RECORDING GAGE

R - AUTOMATIC RECORDING GAGE

ST - STORAGE GAGE

PRECIPITATION STATIONS
ALPHABETICAL INDEX

STATION NAME	STATION NUMBER	EQUIP TYPE	LATITUDE	LONGITUDE	CAL-ZNS T. R. S.	ELEV	RECORD BEGAN	OBSERVER
THOUSAND OAKS-COUNTY FIRE STATION	128	S	34 13' 5"	118 51' 58"	2N 19W 34	800	1943	STATION PERSONNEL
THOUSAND OAKS-WEATHER STATION	169	RS	34 10' 44"	118 51' 0"	1N 19W 10	805	1957	VCPCD
TOFA TOFA	197	ST	34 34' 5"	119 2' 24"	6N 20W 33	2500	1959	VCPCD
TRIPAS CANYON	242	R	34 22' 5"	118 45' 47"	3N 18W 4	2500	1972	VCPCD
UPPER OJAI SUMMIT-COUNTY FIRE STA.	65	S	34 26' 10"	119 8' 2"	4N 22W 12	1560	1925	STATION PERSONNEL
UPPER OJAI-HAPPY VALLEY	64	RS	34 26' 17"	119 11' 20"	4N 22W 09	1320	1901	VCPCD
VENTURA-COUNTY CENTER	222	S	34 16' 5"	119 12' 32"	3N 22W 8	280	1926	VCPCD
VENTURA-COUNTY SCHOOLS	66	S	34 16' 52"	119 17' 28"	2N 23W 4	60	1874	CARNIS WILLIAMS
VENTURA-DEL MAR RANCH	6	S	34 16' 41"	119 12' 11"	2N 22W 5	315	1925	JOSEPH DUNCNESS
VENTURA-HALL CANYON	167	RS	34 16' 48"	119 15' 29"	2N 23W 02	180	1957	VCPCD
VENTURA-KINGSTON RESERVOIR	122	S	34 20' 35"	119 17' 42"	3N 23W 16	215	1935	CITY PERSONNEL
VENTURA-OLD ADOBE	216	S	34 14' 35"	119 14' 31"	2N 23W 24	37	1965	CITY PERSONNEL
VENTURA-SEXTON CANYON	230	R	34 18' 54"	119 13' 37"	3N 22W 30	880	1973	DAN CROTTY
WHEELER CANYON	225	R	34 23' 28"	119 8' 42"	4N 22W 26	900	1967	CURRY V. MCCARTY

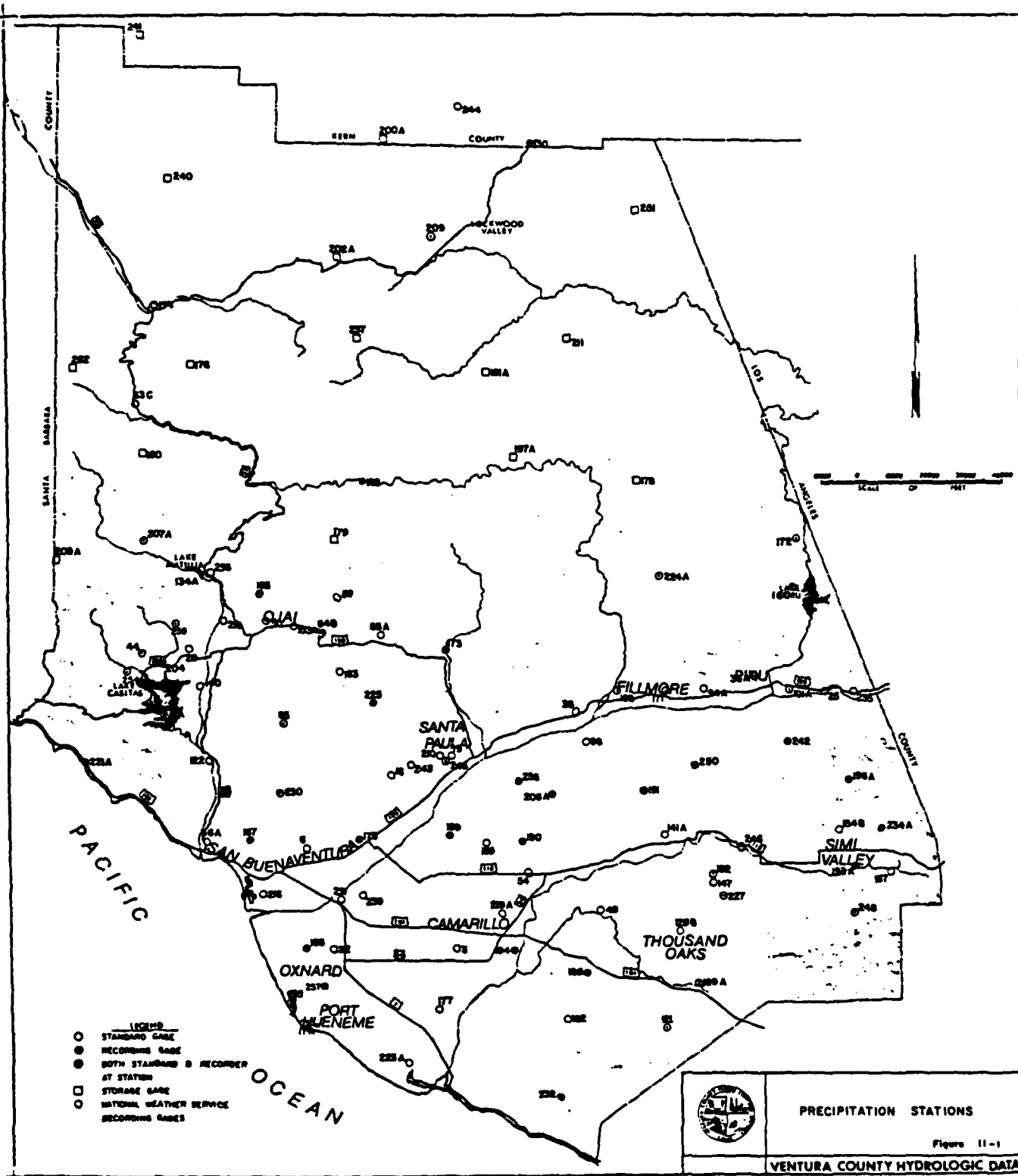
TYPE: S - STANDARD NON-RECORDING GAGE

R - AUTOMATIC RECORDING GAGE

ST - STORAGE GAGE

ACTIVE PRECIPITATION STATIONS
NUMERICAL INDEX

STATION NUMBER	STATION NAME	STATION NUMBER	STATION NAME
3	Camarillo-Springville Ranch	210	Santa Paula-County Fire Station
4A	Casitas Dam	211	Alamo Mountain
6	Ventura-Del Mar Ranch	215	Channel Islands Harbor
17A	Port Hueneme-USN	216	Ventura-Old Adobe
18	Santa Paula - Limoneira Ranch	218	Meiners Oaks-County Fire Station
19	Santa Paula-Agriculture Office	219	Camarillo-Hauser
20	Rancho Matilija-West	221A	Sea Cliff
25	Piru-Newhall Ranch	222	Ventura-County Center
30	Ojai-County Fire Station	223A	Point Mugu-USN
32	Oxnard-Water Department	224	Fillmore-Sespe Westates
36A	Piru-County Fire Station	225	Wheeler Canyon
39	Fillmore-Rancho Sespe	227	Lake Bard
44	Santa Ana Valley-Selby Ranch	230	Ventura-Sexton Canyon
49	Santa Rosa Valley-Worthington Ranch	231	El Rio-County Yard
59	Ojai-Thacher School	232	Santa Monica Mountains - Deals Flat
64B	Upper Ojai-Happy Valley	234A	Las Lajas Canyon
65A	Upper Ojai Summit-County Fire Station	237	San Guillermo
66A	Ventura-County Schools	238	South Mountain-Shell Oil
85	Canada Larga	239	El Rio-UWCD Spreading Grounds
94A	Fillmore-Double HN Ranch	240	Apache Canyon
96	Bardsdale-Young Ranch	241	Cerro Noroeste
101A	Piru-Camulos Ranch	242	Tripas Canyon
121	Lake Sherwood-County Fire Station	243	Santa Paula-Dawes
122	Ventura-Kingston Reservoir	244	Cuddy Valley-Cuddy Ranch
128B	Park Oaks-County Fire Station	245	Santa Paula-United Water Conservation District
134A	Matilija Dam	248	Simi Hills-Burro Flats
140	Oak View-County Fire Station	250	Moorpark-Happy Camp Canyon
141A	Moorpark-County Fire Station	251	Hungry Valley-Maxey Ranch
152	Piedra Blanca Guard Station	252	Potrero Seco
153A	Ojai-Barrett Ranch	254	Station Canyon (USBR)
154B	Simi-County Fire Station	255	Cooper Canyon (USBR)
160	Piru-Temescal Guard Station		
163	Sulphur Mountain-Meher Mount		
165	Ojai-Stewart Canyon		
167	Ventura-Hall Canyon		
168	Oxnard-Airport		
169A	Thousand Oaks-Weather Station		
171	Fillmore-Fish Hatchery		
172	Piru Canyon		
173	Santa Paula Canyon-Ferndale Ranch		
180	Ortega Hill		
181A	Mutau Flat		
182	Newbury Park-Rancho Sierra Vista		
185	Somis-Honda Ranch		
187	Susana Knolls-County Fire Station		
188	Newbury Park-Jenny Drive		
189	Somis-DeBonis		
190	Somis-Bard		
191	Moorpark-Merriken		
192	Moorpark-Everett		
193A	Santa Susana-Airport		
194	Camarillo-Adohr		
196A	Tapo Canyon		
197A	Tops Tops		
199	Fillmore-County Fire Station		
200A	Mount Pinos		
202A	Lockwood/Ozena-Wagon Road Camp		
203A	Murietta Divide		
204	Lake Casitas-Upper		
206A	Somis-Fuller		
207A	Matilija Canyon		
209	Lockwood Valley-County Yard		



5. Precipitation gages, South Central Region. From the California
Department of Water Resources, Bulletin 230-81

TABLE 8. PRECIPITATION STATIONS BY AREAL CODE (continued)

AREAL CODE	OWNER STATION NUMBER	STATION NAME	LATITUDE DEG° MIN SEC"	LONGITUDE DEG° MIN SEC"	TOWNSHIP & RANGE	ELEVATION	RECORD		MAXIMUM PRECIPITATION		MINIMUM PRECIPITATION		MEAN ANNUAL	YEARS TO RECORD
							YEAR BEGN	YEAR END	MAX. ANNUAL	YEAR OCCUR	MIN. ANNUAL	YEAR OCCUR		
T-10.A4	1340-50	CAMBRIA CALTRANS	35-31-50	120-02-25	20S/09E-M	66	1969	1960	1029.8	1969	217.1	1977	621.8	12
	1341-02	CAMBRIA HHS	35-31-50	121-02-25		18	1938	1976	974.3	1941	99.7	1972	399.2	39
	1341-08	CAMBRIA SEWER PROJECT	35-33-59	121-05-56		6	1972	1980	871.9	1978	235.2	1977	340.1	8
	8374-05	SOTO RANCH NR CAMBRIA	35-34-30	120-59-00	27S/09E-M	134	1964	1980	1251.4	1969	238.5	1977	608.9	16
T-10.A6	1598-10	CAYUCOS CR TOGNAZZINI	35-29-40	120-55-21		101	1965	1977	1032.5	1969	285.0	1972	577.7	12
	8403-10	OLD CANYON	35-28-20	120-48-05	29S/11E-M	381	1975	1977	574.6	1975	440.2	1976	507.4	2
T-10.A7	9603-10	WHALE ROCK DAM	35-26-52	120-53-06	28S/10E-M	76	1964	1980	818.3	1969	195.3	1972	427.7	17
	9603-25	WHALE ROCK RES	35-28-35	120-52-25	28S/10E-M	72	1970	1980	928.8	1978	246.3	1972	514.7	11
T-10.B1	5867-00	MORRO BAY	35-22-00	120-51-00		34	1965	1969	588.0	1967	304.0	1966	446.0	2
	5867-60	MORROW BAY 5 MNW	35-24-21	120-51-45		18	1973	1977	771.4	1973	354.4	1976	529.6	4
	5869-00	MORRO BAY 3 M	35-25-00	120-51-00	29S/10E-M	204	1930	1980	887.2	1978	219.5	1972	424.5	51
	9179-00	UPPER MORRO CREEK	35-27-18	120-45-12	28S/11E-M	320	1957	1966						
T-10.B2	9188-90	UPPER TORO CREEK	35-27-42	120-45-36		439	1970	1977	1031.7	1973	305.3	1972	585.5	7
	1444-00	CAMP SAN LUIS OBISPO	35-20-14	120-41-18	30S/12E-M	244	1955	1980	1122.8	1969	262.2	1972	576.7	26
	1444-50	CAMP SAN LUIS OBISPO COC	35-19-17	120-43-15		30	1973	1980	961.2	1978	224.8	1977	551.8	7
	5866-00	MORRO BAY FIRE DEPT	35-22-00	120-51-00	29S/10E-M	35	1959	1980	753.9	1978	188.3	1972	396.6	22
T-10.B3	5867-50	MORRO BAY S D M	35-22-00	120-50-00	29S/10E-M	30	1948	1969	663.6	1958	236.3	1961	375.2	21
	7722-15	SAN BERNARDO RANCH	35-23-20	120-46-00	29S/11E-M	107	1962	1977	1192.6	1969	310.0	1972	645.8	15
	0558-50	RAYWOOD PARK-CO WATER DIS	35-19-34	120-49-17	30S/11E-M	37	1967	1980	755.4	1969	182.6	1977	425.4	13
	5142-00	LOS OSOS	35-18-36	120-48-34		52	1955	1980	991.8	1969	230.8	1977	485.8	25
-10.B4	5142-30	LOS OSOS SIMAS	35-18-38	120-50-35	30S/10E-M	44	1976	1980	732.4	1978	195.7	1977	418.8	4
	8375-40	SOUTH BAY FIRE DEPT	35-18-35	120-49-58		49	1975	1977	492.5	1975	306.6	1976	399.6	2
	0406-00	AVILA	35-10-40	120-43-32		35	1931	1980	953.1	1969	202.2	1959	433.1	49
	4292-00	IRISH HILLS	35-15-06	120-45-35	31S/11E-M	445	1964	1977	1355.4	1969	323.9	1976	687.3	13
	6815-40	PERDIZZI RANCH	35-15-40	120-37-20		143	1952	1980	1203.9	1978	246.4	1977	545.0	26
	7370-50	RESERVOIR CANYON	35-17-30	120-37-36		137	1975	1980	1091.2	1978	243.1	1977	527.8	5
	7850-00	SAN LUIS OBISPO TANK FARM	35-15-20	120-39-30	31S/12E-M	36	1931	1980	1106.5	1978	206.3	1970	488.8	49
	7850-20	SAN LUIS OBISPO BOYO	35-17-35	120-41-00	30S/12E-M	88	1976	1977	315.6	1976				
	7851-00	SAN LUIS OBISPO POLY	35-18-20	120-39-47	30S/12E-M	91	1870	1980	1387.4	1969	186.2	1898	550.5	111
	7851-20	SAN LUIS OBISPO SDF	35-18-07	120-40-34		101	1943	1980	1321.3	1978	262.9	1972	520.6	37
	7851-40	SAN LUIS OBISPO BFP	35-15-16	120-40-24		38	1955	1980	1151.1	1969	142.0	1970	548.6	25
	7851-50	SAN LUIS OBISPO (SDM)	35-16-00	120-40-30	30S/12E-M	46	1955	1980	1121.2	1978	247.7	1977	532.5	26
T-10.B6	7854-00	SAN LUIS OBISPO DOF	35-18-07	120-40-34		101	1965	1969	1179.1	1969	396.7	1966	809.4	3
	9392-05	VORTAC SFP	35-15-06	120-45-35	31S/11E-M	445	1965	1969	1042.8	1967	455.0	1969	748.9	2
	9401-05	WADHAMS	35-13-30	120-41-30		30	1965	1966	469.2	1966				
	2684-10	EONA (STORMETTA)	35-12-30	120-34-00	31S/13E-M	130	1941	1980	1087.2	1969	291.4	1972	515.3	39
T-10.C1	6943-00	PISMO BEACH	35-08-00	120-38-00	32S/12E-M	24	1955	1980	943.5	1978	174.4	1972	441.7	23
	0320-00	ARROYO GRANDE-SLOCRO	35-07-24	120-34-24	32S/13E-M	32	1940	1980	850.3	1941	193.8	1977	396.6	34
	0320-20	ARROYO GRANDE-BATES PLUMB	35-07-10	120-35-25	32S/13E-M	41	1956	1980	797.1	1978	204.3	1977	411.8	24
	0320-30	ARROYO GRANDE-CITY MALL	35-07-30	120-34-30	32S/13E-M	43	1955	1974	738.0	1969	216.5	1972	388.0	19
	0320-45	ARROYO GRANDE CORP YD	35-06-47	120-36-25		23	1967	1980	783.2	1978	166.4	1972	392.0	13
	0320-53	ARROYO GRANDE POLICE DEPT	35-07-13	120-35-25		35	1940	1980	851.6	1941	188.5	1977	396.3	41
	0718-05	BETTEMICOURT	35-15-15	120-29-45	31S/14E-M	227	1960	1977	1557.3	1967	460.6	1972	788.2	17
	5098-50	LOPEZ DAM	35-11-12	120-29-03	31S/14E-M	167	1968	1980	1024.8	1969	191.1	1977	510.5	13
	5098-70	LOPEZ RESERVOIR	35-12-12	120-27-32	31S/14E-M	162	1973	1980	963.0	1978	220.7	1977	563.5	8
	6341-20	OAK PARK	35-09-06	120-39-47	32S/13E-M	61	1954	1977	1102.2	1973	248.8	1959	489.8	23
	6375-06	OCEANO (CSA #13)	35-06-16	120-36-35		24	1968	1980	893.1	1978	169.5	1977	401.3	21
	6375-40	OCEANO WMP	35-06-05	120-37-26		3	1973	1980	757.5	1978	179.1	1977	422.6	8
	6943-05	PISMO BEACH NO 2	35-09-00	120-34-00		21	1974		567.8	1974				
	7153-80	PRINTZ ROAD	35-05-30	120-34-35	32S/13E-M	91	1975	1977	473.3	1975	321.6	1976	397.5	2
	7244-10	RANCHITA	35-12-03	120-25-47		250	1944	1980	1096.8	1967	236.6	1977	546.5	23
	8438-50	SPENCER RANCH	35-13-26	120-26-45		155	1951	1980	1185.0	1969	241.3	1977	585.9	29
T-10.A3	8784-30	TAN SPRINGS	35-07-56	120-32-30	32S/13E-M	88	1969	1976	697.7	1969	205.8	1972	432.6	7
	8869-50	TERMINAL RESERVOIR	35-10-13	120-31-57		102	1976	1980	757.4	1978	200.7	1977	405.3	10
	3888-00	HEARST RANCH	35-19-30	121-11-12		46	1938	1969	1272.5	1958	28.8	1966	627.6	26
	3888-02	HEARST CASTLE	35-41-12	121-10-12	26S/07E-M	549	1948	1980	1562.4	1967	265.0	1977	798.2	33
	3888-10	HEARST CASTLE SAN SIMEON	35-39-03	121-11-11		38	1971	1977	851.7	1973	302.2	1972	485.0	5
	7024-00	PT PIEDRAS BLANCAS	35-40-00	121-17-00		18	1939	1975	1160.5	1969	222.8	1939	504.2	36
	7085-11	SAN SIMEON	35-38-24	121-11-36		5	1938	1977	1318.1	1958	300.7	1972	615.3	39
	9395-05	VULTURE ROCK	35-38-30	121-01-00	26S/09E-M	803	1965	1974	1406.3	1967	449.5	1972	1106.5	8
T-12.A0	0124-20	ALMAR RANCH	34-51-00	120-22-00		274	1969	1975	399.1	1975				
	0719-00	BETTERAVIA	34-55-00	120-31-00	10N/35W-S	47	1973	1975	537.2	1973	353.4	1975	445.3	2
	3682-10	GUADALUPE 39	34-57-00	120-34-00	10N/35W-S	26	1969							
	6207-00	NIPOMO 2 NW	35-04-00	120-30-00	11N/34W-S	110	1921	1980	830.9	1978	158.8	1924	408.3	59
	8207-25	NIPOMO - COF FIRE STATION	35-02-30	120-29-05	11N/34W-S	98	1959	1980	778.8	1978	144.2	1961	370.1	21
	8486-03	ORCUTT LARSEN	34-52-00	120-27-00		104	1969							
	8486-11	ORCUTT UNION OIL	34-51-48	120-26-48	09N/34W-S	9								

TABLE 8. PRECIPITATION STATIONS BY AREAL CODE (continued)

AREAL CODE	DWR STATION NUMBER	STATION NAME	LATITUDE DEG° MIN SEC'	LONGITUDE DEG° MIN SEC'	TOWNSHIP & RANGE	ELEVATION	RECORD		MAXIMUM PRECIPITATION		MINIMUM PRECIPITATION		MEAN ANNUAL	YEARS OF RECORD
							YEAR BEGIN	YEAR END	MAX. ANNUAL	YEAR OCCUR	MIN. ANNUAL	YEAR OCCUR		
T-12.C0	9024-10	LOCKWOOD VALLEY	34-44-03	119-06-09		1570	1965	1976	573.7	1969	196.1	1968	349.2	7
	6134-00	NEW CUYAMA FIRE STATION	34-57-00	119-41-00	10N/26E-5	658	1976	1980	394.3	1978	191.0	1976	311.9	3
	6136-50	NEW CUYAMA HWY MAINT STN	34-57-00	119-41-00	10N/26W-5	661	1969	1975	246.4	1973	167.0	1975	206.7	2
	6576-00	OZENA	34-42-00	119-19-00	07N/23W-5	1129	1904	1964	689.9	1911	117.9	1949	330.8	51
	6977-00	OZENA GUARD STATION	34-40-57	119-21-08	07N/23W-5	1094	1976	1978	1015.9	1978	264.0	1977	523.1	3
	6890-00	PINE CANYON G S	33-03-00	120-11-00	11N/32W-5	255	1938	1948	443.8	1945	191.0	1947	368.8	7
	7942-00	SANTA MARIA 14 ENE	33-01-00	120-12-00	11N/32W-5	248	1957	1958						
	9111-00	TWITCHELL DAM	34-59-00	120-19-00	11N/33W-5	177	1963	1980	799.1	1978	188.3	1972	433.6	18
	9283-00	VENTUCOPA R S	34-51-00	119-29-00		838	1970	1972	155.7	1971	33.5	1970	98.7	3
	9458-00	WASIOJA PHOENIX RCH	34-59-00	119-54-00		722	1970	1972	218.5	1970				
T-13.00	3787-00	HARRIS GAGING STN	34-46-00	120-25-00	08N/34W-5	98	1980	1984	361.6	1982	207.8	1961	334.8	4
	5107-00	LOS ALAMOS	34-45-00	120-17-00	08N/32W-5	172	1909	1980	770.5	1931	132.8	1924	392.7	67
T-14.A0	5064-00	LOMPOC SEWAGE PLT	34-39-40	120-29-00	07N/34W-5	22	1919	1980	1030.9	1941	139.2	1924	372.4	53
	5064-02	LOMPOC A P	34-38-30	120-27-24		27	1966	1967						
T-14.B0	5064-40	LOMPOC HWY MAINT STATION	34-39-00	120-27-00	06N/34W-5	30	1973	1975	514.2	1973	399.0	1975	456.6	2
	5064-60	LOMPOC AVE FIRE STATION	34-41-00	120-26-00	07N/34W-5	73	1969	1975	506.2	1973	421.6	1975	463.9	2
	7015-00	PT ARGUELLO WB	34-40-00	120-35-00		113	1959	1964	418.7	1962	219.5	1960	297.7	4
	7869-41	SAN MIGUELITO CYN	34-35-20	120-29-40	06N/34W-5	329	1965							
	8697-00	SURF ZONE	34-41-00	120-34-00	07N/35W-5	32	1948	1978	497.5	1978	98.4	1972	229.5	9
	9253-00	VANDENBERG AFB	34-40-00	120-35-00	07N/35W-5	112	1964							
	7681-00	SALSIPUEDES GAGING ST	34-35-00	120-24-00		76	1957	1980	920.8	1978	194.8	1972	452.8	18
	0453-50	BALLARD DIBELBLISS	34-38-00	120-07-00		198	1969							
	3048-00	FIGUEROA MOUNTAIN	34-44-10	120-00-20		975	1970	1978	1099.7	1978	264.1	1972	532.9	6
	7976-00	SANTA YNEZ	34-37-00	120-06-00		183	1948	1978	855.8	1978	139.7	1972	335.3	11
T-14.E1	7976-20	SANTA YNEZ CO ROAD YARD	34-36-00	120-04-00		199	1969	1973	530.6	1973				
	3402-00	GIBRALTAR DAM Z	34-31-24	119-41-18	05N/27W-5	472	1960	1980	1521.0	1978	307.3	1961	680.8	17
T-14.E2	4422-00	JUNCKER DAM	34-29-00	119-31-00	05N/25W-5	628	1941	1980	1631.4	1978	264.3	1951	702.2	36
	5147-00	LOS PRIETOS R S	34-32-42	119-47-06	05N/28W-5	314	1942	1979	1096.5	1958	262.9	1951	536.1	33
	6791-00	PENOLLA GS	34-31-00	119-34-00	05N/26W-5	494	1943	1958	1210.2	1952	239.2	1951	520.1	14
	7861-00	SAN MARCOS RANCH	34-33-00	119-32-00		244	1957	1969	1132.8	1958				
	7909-00	SANTA BARBARA TV PK	34-31-32	119-57-27	05N/29W-5	1219	1957	1973	1559.7	1958	355.4	1972	643.7	10
	1253-00	CACHUMA DAM	34-35-00	119-59-00	06N/29W-5	238	1957	1980	1080.3	1978	253.6	1968	514.5	18
	2754-20	EL CAPITAN BEACH STATE PK	34-28-00	120-01-00		9	1968	1969						
	3494-67	GOLETA-EL EMCA H-CHAPPELL	34-26-00	119-53-00	04N/29W-5	24	1969							
	3495-65	GOLETA MOVE	34-29-00	119-53-00	04N/29W-5	122	1969							
	7016-00	POINT ARGUELLO-LIGHT STA	34-34-38	120-39-00	06N/36W-5	23	1941	1977	565.7	1973	164.9	1972	314.4	25
T-15.A0	7016-21	POINT CONCEPTION LIGHT ST	34-26-57	120-28-15	04N/34W-5	34	1965							
	7356-50	REFUGIO BEACH STATE PARK	34-28-00	120-04-00		3	1969							
	3494-60	GOLETA ALFSEN	34-27-00	119-50-00	04N/28 W-5	12	1969	1973	746.1	1969	684.9	1973	715.5	2
	3494-62	GOLETA BEACH COUNTY PARK	34-25-00	119-50-00		3	1969							
	7859-00	SAN MARCOS PASS -RRNG	34-30-42	119-49-25	05N/28W-5	701	1972	1978	1313.4	1973	489.0	1972	818.5	6
	7859-60	SAN MARCOS PASS TENNEY	34-30-00	119-49-00	05N/28W-5	1045	1969	1975	1165.0	1973	870.7	1975	1017.9	2
	7859-65	SAN MARCOS PASS TROUT CLB	34-29-00	119-48-00	05N/28W-5	366	1969							
	7905-00	SANTA BARBARA FAA AP	34-26-00	119-50-06	04N/28W-5	3	1942	1980	937.6	1978	176.1	1959	391.6	37
	8593-20	STON PARK	34-27-00	119-51-00		24	1969	1973	717.6	1973				
	9046-50	TUCKER GROVE PARK	34-27-00	119-47-00	04N/28W-5	44	1969	1975	832.6	1973	583.1	1975	707.9	2
T-15.B1	1386-50	CATER WATER TREATMENT PLT	34-27-00	119-44-00	04N/27W-5	122	1969							
	3494-64	GOLETA BRYSON	34-26-00	119-47-00		18	1969	1975	637.6	1973	376.2	1975	506.9	2
	6892-01	PINE CREST	34-28-00	119-42-00	05N/27W-5	305	1888	1916	1096.8	1909	285.9	1899	606.7	17
	7902-00	SANTA BARBARA	34-25-00	119-42-00	04N/27W-5	30	1868	1980	1149.5	1941	114.0	1877	454.8	113
	7907-50	SANTA BARBARA PHILLIPS	34-27-00	119-45-00		91	1969	1975	811.8	1973	633.4	1975	722.6	2
	7908-50	SANTA BARBARA RICHTER	34-28-00	119-42-00		381	1969							
	7908-70	SANTA BARBARA WHITEHOUSE	34-24-00	119-43-00	04N/27W-5	61	1969	1975	562.4	1973	434.6	1975	498.5	2
	5788-11	MONTECITO W C OF-503 S YS	34-26-27	119-37-53	04N/26W-5	76	1969	1975	959.6	1969	547.6	1975	733.0	3
	5788-60	MONTECITO LATHIN	34-27-00	119-37-00		152	1969	1975	1132.3	1969	648.4	1975	868.2	3
	1340-00	CARPINTERIA RESERVOIR	34-24-00	119-29-00	04N/25W-5	117	1970	1978	1028.8	1978	226.2	1972	452.1	8
T-15.B2	1548-01	CARPINTERIA	34-23-36	119-31-12		3	1973	1975	602.8	1973	434.6	1975	518.7	2
	2493-11	DOULTON TUNNEL 231	34-27-54	119-42-30	04N/26W-5	541	1966	1975	1440.6	1969	675.4	1975	1031.3	4
	8415-00	SOUTH PORTAL	34-27-25	119-33-50	04N/26W-5	541	1969	1975	1201.9	1969	727.4	1975	961.2	3
	8642-60	SUNMERLAND	34-25-00	119-34-00	04N/26W-5	15	1969							
	7867-10	SAN MIGUEL ISLAND	34-03-00	120-23-00		168	1894	1921	596.8	1911	168.5	1920	355.7	27
	8040-50	SEA CLIFF-CHAMSLOR WEST	34-20-48	119-25-03	03N/24W-5	15	1975	1976	336.0	1975	310.7	1976	323.4	2
	1472-11	CANADA LARGA	34-22-53	119-13-41	04N/22W-5	232	1965	1976	927.1	1969	368.3	1968	559.2	7
	4988-51	KINGSTON RESERVOIR	34-20-36	119-17-42	03N/23W-5	66	1965	1976	647.0	1967	369.2	1968	454.7	6
	9285-00	VENTURA	34-16-36	119-17-30		14	1874	1980	932.5	1941	132.6	1877	386.1	106
	9285-04	VENTURA CH	34-16-56	119-17-30		30	1965	1969	566.9	1969	330.4	1966	414.9	3
T-15.B3	0513-11	BARRE M OJAI RCH	34-26-28	119-13-13		244	1965	1976	1151.1	1969	358.9	1976	640.4	7
	1558-00	CASITAS DAM	34-22-08	119-19-49	03N/23W-5	122	1966	1977	1182.8	1969	288.9	1977	619.1	7
	1558-12	CASITAS RANCH-HOFFMAN	34-22-06	119-20-12	03N/23W-5	122	1965	1967						
	1559-00	CASITAS RESERVOIR	34-22-08	119-19-49	03N/23W-5	122	1965	1975	1207.7	1969	418.1	1968	694.3	6
	5408-01	MATILIJIA DAM	34-29-05	119-18-25		317	1967	1976	1779.0	1969	382.1	1968	787.4	9
	5408-02	MATILIJIA RCH	34-25-51	119-18-53		198	1965	1969	1208.0	1969	642.6	1966	925.3	2
	5408-03	MATILIJIA RES	34-29-34	119-19-37		351	1965	1967	1097.0	1966				
	5408-04	MATILIJIA CANYON	34-30-14	119-21-17	05N/24W-5	427	1965	1976	1139.5	1966	638.1	1976	888.8	2
	5417-00	MATILIJIA DAM	34-29-05	119-18-24	05N/23W-5	323	1970	1978	1137.9	1973	342.9	1977	586.3	8
	5507-41	REINERS OAKS-CO FIRE STA	34-26-39	119-17-11	04N/23W-5	232	1974		411.4	1974				
T-15.B4	5509-52													

TABLE 8. PRECIPITATION STATIONS BY AREAL CODE (continued)

AREAL CODE	DWR STATION NUMBER	STATION NAME	LATITUDE DEG MIN SEC"	LONGITUDE DEG MIN SEC"	TOWNSHIP & RANGE	ELEVATION	RECORD		MAXIMUM PRECIPITATION		MINIMUM PRECIPITATION		MEAN ANNUAL	YEARS OF RECORD
							YEAR BEGN	YEAR END	MAX. ANNUAL	YEAR OCCUR	MIN. ANNUAL	YEAR OCCUR		
U-02.80	8085-02	SELBY RANCH-ST ANA V-RRNG	34-25-32	119-21-22	04N/24W-5	201	1965	1969	1205.0	1969				
	8365-51	SOPERS RANCH-MATILIJIA-S+E	34-28-58	119-17-37	05N/23W-5	274	1965	1968	1038.6	1967	378.7	1968	719.9	3
	9615-00	WHEELER SPRINGS 2 SSW	34-28-58	119-17-37	05N/23W-5	267	1948	1952	432.3	1950	269.4	1951	339.0	3
U-02.C1	2399-00	DENNISON RANCH-UPPER OJAI	34-25-54	119-11-48	04N/22W-5	381	1965	1966						
U-02.C2	7403-11	RICHFIELD OIL	34-26-08	119-08-02		475	1965	1976	1437.2	1969	414.7	1968	757.5	4
	9182-05	UPPER OJAI-SUMMIT FIRE ST	34-26-18	119-08-24	04N/22W-5	469	1974	1975	650.0	1975	518.7	1974	584.4	2
	6536-11	STEWART CANYON	34-27-38	119-14-50	04N/23W-5	293	1965	1976	1111.8	1969	370.1	1976	660.3	3
U-03.A1	8879-00	THACHER SCHOOL	34-27-58	119-10-49	05N/22W-5	415	1965	1976	568.2	1975	318.0	1968	414.9	5
	0978-51	BORGSTROM	34-16-47	119-15-27		61	1965	1968	333.4	1968				
	1658-50	CHANNEL ISLAND HARBOR	34-09-36	119-13-18	01N/22W-5	2	1974	1976	365.0	1974	235.1	1976	282.4	3
U-03.A2	2785-50	EL RIO - VCFD YARD	34-14-23	119-10-43	02N/22W-5	24	1975	1976	365.9	1975	320.6	1976	343.3	2
	2785-60	EL RIO UNCO SPREADING GO	34-14-27	119-09-03	02N/22W-5	32	1976		288.9	1976				
	3715-00	HALL CANYON RESERVOIR	34-16-49	119-15-30	02N/23W-5	55	1965	1976	573.9	1969	323.6	1976	426.1	4
U-03.B1	6403-11	OLD ADOBE-VENTURA PARK DE	34-14-36	119-14-36	02N/23W-5	11	1974	1975	396.5	1974	379.5	1975	388.0	2
	6569-00	OXNARD-CITY WATER DEPT	34-12-05	119-10-30	01N/22W-5	15	1924	1980	969.5	1941	140.9	1972	364.2	51
	6569-01	OXNARD WATER DEPARTMENT	34-12-03	119-10-41	01N/22W-5	16	1965	1976	402.6	1967	283.9	1976	335.1	4
U-03.B2	6569-11	OXNARD DIST 5 YARD	34-12-07	119-12-25		11	1965	1969	506.2	1969	346.8	1966	426.5	2
	6572-00	OXNARD AIRPORT	34-12-05	119-12-27	01N/22W-5	10	1975	1976	291.0	1975	259.6	1976	275.3	2
	7020-70	POINT MUGU N.A.S-USN	34-07-06	119-06-24	01S/21W-5	3	1975		249.8	1975				
U-03.C1	7080-00	PORT HUENEME	34-08-40	119-12-30	01N/22W-5	6	1945	1976	651.3	1952	141.0	1959	310.1	25
	8008-02	SATICOV-CULBERTSON	34-17-05	119-08-38		52	1949	1966	692.2	1952	155.9	1959	343.8	15
	8008-03	SATICOV-OEL MAR RANCH	34-16-40	119-12-10	02N/22W-5	91	1965	1976	648.9	1969	352.1	1976	455.2	6
U-03.C2	9590-01	WEST SATICOV-CLOUD-MANSON	34-16-36	119-09-54	02N/22W-5	46	1893	1917	627.2	1893	134.7	1898	393.6	21
	0179-10	AMERICAN C SUGAR CO	34-12-17	119-04-04		18	1965	1976	491.3	1969	255.3	1976	348.0	6
	1336-00	CAMARILLO-ADONR	34-12-17	119-00-45	01N/20W-5	40	1966	1969	478.3	1969	311.0	1966	385.7	3
U-03.D1	1338-20	CAMARILLO-HAUSER	34-14-13	119-01-34	02N/21W-5	59	1974	1976	322.6	1975	259.9	1976	296.8	3
	1339-00	CAMARILLO - ADONR	34-12-17	119-00-45	01N/20W-5	40	1975	1976	270.1	1975	215.9	1976	243.0	2
	2303-11	DAVIS RANCH	34-09-25	119-04-40	01N/21W-5	6	1965	1976	344.9	1968	223.3	1967	267.3	6
U-03.D2	0677-11	BLANCHARD INV CO	34-21-23	119-04-25		84	1965	1973	877.3	1969	393.7	1968	635.2	3
	3036-15	FERNOLE RANCH-SANTA PAUL	34-25-41	119-05-26	04N/21W-5	293	1965	1976	1274.9	1969	392.3	1976	739.7	4
	4943-00	LEMONDEIRA RANCH	34-19-54	119-07-31	03N/21W-5	90	1945	1976	763.8	1952	156.5	1959	380.1	25
U-03.E1	5507-21	MEHER MTR	34-24-44	119-10-08		783	1965	1975	991.7	1967	394.0	1968	710.6	4
	7957-00	SANTA PAULA-VCFD HQS	34-20-50	119-04-48	03N/21W-5	80	1800	1980	968.0	1941	155.8	1959	438.6	76
	7957-01	SANTA PAULA-BLANCHARD INV	34-21-00	119-04-26	03N/21W-5	84	1975		496.0	1975				
U-03.E2	7957-03	SANTA PAULA CYN	34-23-41	119-05-25		309	1974		395.9	1974				
	7957-05	SANTA PAULA-CO DEPT AGRI	34-21-19	119-03-42	03N/21W-5	88	1949	1976	810.5	1952	171.8	1959	380.0	17
	7957-40	SANTA PAULA-DAMES	34-20-35	119-06-30	03N/21W-5	99	1976		301.0	1976				
U-03.F1	7958-00	SANTA PAULA-BARRANCA	34-18-30	119-06-30		56	1966	1976	481.8	1975	396.4	1976	439.1	2
	7958-50	SANTA PAULA-UNCO	34-20-42	119-04-36	03N/21W-5	79	1897	1976	968.0	1941	160.6	1898	430.4	79
	8008-04	SATICOV FIRE STATION	34-17-08	119-09-18	02N/22W-5	56	1965	1969	628.9	1969	376.4	1966	502.7	2
U-03.F2	8638-50	SULPHUR MOUNTAIN	34-24-42	119-10-09	04N/22W-5	783	1976		434.3	1976				
	9612-20	WHEELER CANYON - MC CARTY	34-23-26	119-08-45	04N/22W-5	274	1976		328.6	1976				
	0506-11	BARDSDALE YOUNG RANCH	34-21-49	118-56-42	03N/20W-5	122	1965	1976	881.7	1969	279.9	1976	545.2	8
U-03.G1	3050-00	FILLMORE 1 WW	34-24-12	118-55-33	04N/20W-5	133	1960	1977	911.9	1969	164.4	1961	503.9	11
	3050-11	FILLMORE CITRUS ASSN	34-23-54	118-55-06		117	1949	1966	861.5	1958	169.5	1961	420.8	15
	3050-13	FILLMORE FISH HATCH	34-23-37	118-53-06	04N/19W-5	143	1965	1976	824.7	1969	252.5	1976	505.2	4
U-03.G2	6910-01	PINE TREE RANCH	34-22-26	119-00-48	03N/20W-5	119	1966	1975	994.3	1967	372.6	1968	491.1	5
	7249-61	RANCHO SESPE	34-23-00	118-57-52		131	1965	1976	661.7	1967	307.7	1976	478.8	6
	1747-50	CHORRO GRANDE RANCH-UP SE	34-35-42	119-19-12	06N/23W-5	1219	1945	1963	1175.5	1958	219.7	1951	500.9	18
U-03.H1	3050-50	FILLMORE-SESPE WESTATES	34-29-02	118-53-13	05N/19W-5	838	1975		667.1	1975				
	5780-00	MOMO RANCH	34-33-10	119-12-50	05N/22W-5	978	1902	1914	1488.0	1914	486.0	1902	869.5	13
	6862-00	PIEDRA BLANCA G S	34-33-39	119-09-56	06N/22W-5	934	1957	1977	1643.4	1969	279.8	1961	601.2	14
U-03.H2	6862-01	PIEDRA BLANCA G.S. -RRNG	34-33-39	119-09-56	06N/22W-5	934	1975		556.2	1975				
	6902-51	PINE MOUNTAIN-STORAGE GAG	34-38-22	119-19-19	06N/23W-5	2054	1969		1481.3	1969				
	6910-00	PINE MOUNTAIN INN	34-36-34	119-21-52	06N/23W-5	1280	1965	1978	784.8	1973	373.1	1972	533.3	6
U-03.I1	9618-00	WHEELER SPRINGS 7 N	34-35-50	119-19-30	06N/23W-5	1265	1948	1952	375.1	1950	209.5	1951	286.9	3
	1471-19	CAMULOS RANCH HQ	34-24-22	118-43-34	04N/18W-5	223	1965	1969	807.2	1969	394.9	1968	589.7	3
	2492-50	DOUBLE M N RANCH	34-23-42	118-51-06		183	1965	1975	827.5	1969	404.0	1975	572.5	5
U-03.I2	4859-30	LEAVENS P GOODENOUGH RCH	34-23-30	118-50-24	04N/19W-5	168	1974		386.1	1974				
	6159-11	MEWHALL RANCH	34-24-08	118-44-10	04N/18W-5	206	1936	1977	942.8	1941	161.7	1961	436.5	38
	6940-00	PIRU 2 ESE-CAMULOS RM HQ	34-24-22	118-43-34	04N/18W-5	223	1958	1980	948.1	1978	14.7	1959	431.2	18
U-03.I3	6940-01	PIRU CAMULOS RCH	34-24-20	118-43-20		219	1977		330.6	1977				
	6940-02	PIRU CANYON-ABO LAKE PIRU	34-30-47	118-45-27	05N/18W-5	351	1965	1977	876.6	1969	247.0	1976	478.9	7
	6940-03	PIRU FIRE STATION	34-24-47	118-47-42	04N/18W-5	213	1965	1976	363.2	1974	250.0	1976	321.8	3
U-03.J1	6942-40	PIRU TENESCAL G S	34-28-22	118-45-21	05N/18W-5	351	1977		351.2	1977				
	7928-00	SANTA FELICIA DAM-LK PIRU	34-28-24	118-45-42	05N/18W-5	349	1965	1969	1020.6	1969	397.8	1968	685.3	3
	8845-00	TERESCAL G S-IN LAKE PIRU	34-28-42	118-45-16	05N/18W-5	293	1974	1976	458.9	1975	266.1	1976	392.4	3
U-03.J2	1152-70	BUCK CK GUARD STA	34-41-40	118-51-24	07N/19W-5	908	1968	1968	355.8	1967	231.7	1968	292.8	2
	6308-20	OAK FLAT GUARD STA	34-35-52	118-43-25		869	1965	1977	1010.6	1967	362.4	1977	557.5	6
	7170-55	PYRAMID RESERVOIR	34-40-36	118-46-55	07N/18W-5	760	1967	1977	655.0	1969	285.0	1974	368.7	6
U-03.J3	7425-01	RIDGE ROUTE MAINT STA	34-40-34	118-46-53	07N/18W-5	762	1937	1944	1151.5	1941	146.0	1951	407.0	41
	3511-11	GORMAN-DEWEY RALPH	34-47-16	118-49-55										

TABLE 8. PRECIPITATION STATIONS BY AREAL CODE (continued)

AREAL CODE	DWR STATION NUMBER	STATION NAME	LATITUDE DEG' MIN' SEC"	LONGITUDE DEG' MIN' SEC"	TOWNSHIP & RANGE	ELEVATION	RECORD		MAXIMUM PRECIPITATION		MINIMUM PRECIPITATION		MEAN ANNUAL	YEARS OF RECORD
							YEAR BEGIN	YEAR END	MAX. ANNUAL	YEAR OCCUR	MIN. ANNUAL	YEAR OCCUR		
U-03.E1	1562-21	CASTIAC JUNCTION	34-26-23	118-36-20		305	1948	1977	629.8	1952	125.9	1961	298.7	30
	2516-00	DRY CANYON RESERVOIR	34-28-55	118-31-40	05N/16W-5	463	1930	1980	858.8	1978	139.2	1951	338.4	51
	2734-01	ELIZABETH LAKE-STRANDBERG	34-39-35	118-22-38	07N/14W-5	1013	1956	1965	852.5	1958	210.9	1961	383.9	10
	2734-21	ELIZABETH LAKE CYN-CAMP 3	34-37-55	118-31-47	06N/16W-5	716	1933	1936	633.4	1935	338.4	1933	501.3	4
	2734-25	ELIZABETH LAKE-MUNZ RANCH	34-40-00	118-25-20	07N/15W-5	991	1974		676.7	1974				
	2739-00	ELIZABETH LK C-RADIUM H S	34-36-28	118-33-40	06N/16W-5	832	1928	1979	1104.7	1941	260.2	1961	556.0	49
	3067-10	FISH CREEK	34-36-10	118-39-36	06N/17W-5	509	1967	1969	932.4	1969	377.3	1968	654.9	2
	3812-11	MASLEY CANYON	34-28-44	118-41-04		526	1949	1978	969.2	1978	152.0	1961	413.1	29
	5146-00	LOS PINETOS MIKE STE	34-21-14	118-24-45		1196	1967		927.1	1967				
	5204-51	LYONS CYN-NEWMALL-LYONS	34-22-10	118-33-38	03N/16W-5	402	1948	1951	302.2	1950	261.3	1948	285.7	3
	5688-01	MINT CANYON-THE OAKS	34-30-47	118-21-31	05N/14W-5	716	1946	1979	657.1	1969	131.5	1961	302.7	32
	5688-02	MINT CANYON-DYER	34-26-04	118-26-06		495	1947	1978	652.9	1969	118.4	1951	288.4	31
	5688-50	MINT CANYON FIRE STATION	34-30-35	118-21-40		701	1977		221.5	1977				
	6034-15	MUNZ RANCH	34-40-12	118-25-20		991	1975	1976	181.8	1976	180.1	1975	181.0	2
	6159-00	NEWMALL AIRPORT-CAA -RRNG	34-23-37	118-32-32	04N/16W-5	369	1941	1962	635.0	1942	310.3	1947	403.9	6
	6159-01	NEWMALL-SPRR DEPOT	34-22-47	118-31-36	04N/16W-5	387	1877	1950	1207.8	1941	134.7	1899	462.1	56
	6162-00	NEWMALL SOLEDAD 32C	34-23-07	118-31-54		379	1927	1980	1158.6	1978	177.0	1951	453.2	53
	6164-00	NEWMALL U S RS	34-22-13	118-30-46		408	1937	1968	1082.7	1941	215.3	1951	493.4	31
	6567-11	OWENS MOUTH	34-19-28	118-34-14		869	1965	1969	1010.2	1967	530.6	1968	797.9	3
	6891-00	PINE CANYON PAT STN	34-40-27	118-25-49	07N/15W-5	1003	1931	1979	1118.0	1978	135.1	1951	476.0	47
	6891-01	PINE CANYON G S	34-41-55	118-30-35		1166	1957	1975	1168.7	1969	247.7	1960	501.4	18
	6942-00	PIRU TELEMETERING	34-24-00	118-42-00		244	1973	1978	530.8	1973	327.6	1977	420.7	3
	6959-51	PLACERITA CANYON	34-22-40	118-28-35		454	1930	1977	1154.2	1941	221.5	1951	515.8	43
	7102-41	POTRERO CANYON	34-23-50	118-38-18		351	1965	1977	690.7	1969	322.7	1975	452.7	7
	7220-00	RADIUM HOT SPGS 1288	34-36-00	118-34-00		634	1959	1961	773.2	1960				
	7425-02	RIDGE RT PARADISE RCH	34-33-54	118-40-54		0	1940	1959	1204.5	1941	203.1	1951	479.2	18
	7685-01	SALT CANYON	34-21-24	118-39-42		869	1949	1977	988.4	1952	209.5	1951	511.9	28
	7732-05	SAND CANYON-RILEY RANCH	34-22-42	118-24-28	03N/15W-5	979	1930	1978	1186.2	1978	178.8	1951	515.2	34
	7732-11	SAND-IRON CANYONS-HANSEN	34-23-40	118-24-42	04N/15W-5	933	1965	1975	885.9	1967	445.5	1968	599.9	6
	7735-70	SAND CANYON	34-23-17	118-24-50		550	1977		442.3	1977				
	7773-00	SAN FRANCISQUITO 2	34-32-02	118-31-27	05N/16W-5	482	1933	1979	1003.3	1978	174.5	1959	421.6	46
	7773-20	SAN FRANCISQUITO CYN-C 17	34-33-55	118-28-28	06N/15W-5	561	1974	1977	325.9	1974	252.6	1976	295.7	3
	7773-23	SAN FRANCISQUITO CYN PH1	34-35-25	118-27-15	06N/15W-5	642	1930	1979	906.5	1941	203.5	1961	437.3	41
	7912-12	SANTA CLARA RIVER	34-25-14	118-28-18		411	1951	1956	607.7	1952	115.7	1951	288.8	6
	7973-01	SANTA SUSANA DEVIL CN	34-20-18	118-36-44		1018	1949	1969	1117.8	1958	266.5	1961	555.2	19
	7973-14	SANTA SUSANA MTN SALT CYN	34-21-24	118-39-42		869	1977		407.0	1977				
	8014-00	SAUGUS POWER PLANT 1	34-35-20	118-27-10	06N/15W-5	642	1933	1980	1021.9	1978	203.5	1961	470.1	44
	8014-03	SAUGUS EDISON STA	34-25-21	118-34-26		334	1930	1979	883.2	1978	129.3	1961	338.2	48
	8014-05	SAUGUS HWY STA	34-25-19	118-32-25		357	1938	1960	938.1	1941	138.4	1959	340.7	22
	8014-08	SAUGUS-NEWMALL	34-24-56	118-32-51		351	1942	1974	639.5	1969	135.5	1961	334.0	30
	8338-10	SOLEDAD CYN-BERMITE	34-24-50	118-31-25		366	1965	1969	792.5	1969	325.4	1968	561.9	3
	8338-50	SOLEDAD CYN HONBY	34-25-13	118-30-08		387	1966	1967						
	8338-70	SOLEDAD CANYON-MITCHELL	34-24-47	118-26-24	04N/15W-5	449	1938	1947	901.7	1941	274.5	1940	545.8	7
	8449-40	SPRING CYN	34-26-35	118-21-50		556	1965	1969	353.3	1967	249.3	1968	309.5	3
U-03.E2	9485-00	WAYSIDE HONOR RANCH -EVAP	34-27-41	118-36-44	04N/17W-5	323	1968	1969	321.2	1968				
	1013-00	BOUQUET CANYON RES (B)	34-35-14	118-21-45	06N/14W-5	931	1930	1979	838.4	1969				
	1013-15	BOUQUET CANYON RES (A)	34-35-30	118-22-08	06N/14W-5	945	1977		301.5	1977	176.5	1951	409.1	46
	4904-20	LEONA VALLEY RACKETT	34-35-14	118-21-45		930	1976		325.7	1976				
U-03.E3	5823-00	MOORPARK 1 SSE	34-16-42	118-52-36	02N/19W-5	158	1957	1977	672.4	1958	126.6	1961	325.3	13
	0014-00	ACTON ESCONDIDO CYN	34-29-31	118-16-30	05N/13W-5	890	1897	1980	591.8	1978	64.4	1898	254.0	84
	0014-01	ACTON ALISO CANYON	34-24-56	118-05-28	04N/12W-5	1195	1938	1979	991.7	1941	194.0	1961	482.2	38
	0014-02	ACTON ALISO CYN BLUM	34-27-51	118-09-25		884	1932	1979	611.9	1978	90.5	1960	251.5	46
U-03.E5	0014-03	ACTON CAMP 2	34-27-02	118-11-52		777	1930	1979	561.0	1941	75.5	1960	240.1	46
	0014-04	ACTON-COLONBO RCH	34-25-20	118-11-52		945	1939	1977	827.0	1941	98.2	1951	309.0	35
	0014-05	ACTON HUBBARD RCH	34-30-50	118-14-10	05N/13W-5	991	1930	1979	596.4	1941	87.1	1951	269.3	49
	0109-50	ALISO CYN-WAGON WHEEL RCH	34-24-56	118-05-28	04N/12W-5	1195	1973	1977	458.6	1974	338.6	1976	410.6	5
	0114-70	ALISO CYN BLUM RCH	34-27-33	118-09-20		884	1915	1977	568.5	1941	90.5	1960	239.1	61
	0247-50	AQUA DULCE CANYON	34-27-24	118-19-59		625	1943	1960	655.6	1943	102.7	1951	283.3	18
	5256-00	MAGIC MOUNTAIN	34-21-45	118-17-12		1356	1948	1974	421.9	1974	216.0	1951	340.9	3
	5256-25	MAGIC MOUNTAIN USCE	34-23-18	118-11-20		1439	1950	1975	1023.8	1958	189.4	1961	462.8	16
	5637-00	MILL CREEK SUMMIT R S	34-23-25	118-04-50	04N/11W-5	1515	1977	1978	1071.9	1978	447.1	1977	759.5	2
	5601-23	PACOLIMA CYN MF RS	34-23-17	118-15-06		1274	1976	1977	454.5	1976	404.1	1977	429.3	2
	8337-50	SOLEDAD CANYON	34-26-23	118-17-33		655	1936	1979	876.1	1978	131.2	1951	351.6	40
	8338-02	SOLEDAD CYN-ECKLES	34-26-15	118-17-38		686	1965	1976	690.1	1969	284.3	1976	405.3	7
	8338-04	SOLEDAD PASS	34-29-38	118-05-24		1100	1954	1978	533.3	1978	117.4	1960	226.6	25
	9345-00	VINCENT FIRE STN	34-29-17	118-08-29	05N/12W-5	956	1927	1980	504.3	1941	76.2	1956	214.4	48
	9347-10	VINCENT PATROL STA	34-29-42	118-07-48		991	1976		189.5	1976				
	9347-20	VINCENT PATROL STATION	34-29-17	118-08-27		956	1930	1979	504.3	1941	76.2	1956	216.9	48
U-03.F1	1338-00	CAMARILLO 4 MW	34-16-22	119-04-38	02N/21W-5	107	1965	1966						
	4075-80	MOMOA SARRANCA NR SOMIS	34-16-08	119-02-56	02N/21W-5	107	1960	1963	482.6	1962	149.9	1961	263.6	4
	8349-00	SOMIS 3 MW	34-17-00	119-02-30	02N/21W-5	155	1957	1977	783.4	1958	172.0	1959	391.6	15
	8350-30	SOMIS 5 MW	34-17-07	119-04-20	02N/21W-5	158	1965	1976	502.7	1967	274.3	1976	392.6	4
	8350-02	SOMIS-AGGEN RANCH	34-16-08	119-02-04	02N/21W-5	114	1965	1968	389.2	1966</				

TABLE 8. PRECIPITATION STATIONS BY AREAL CODE (continued)

AREAL CODE	OWNER STATION NUMBER	STATION NAME	LATITUDE DEG MIN SEC"	LONGITUDE DEG MIN SEC"	TOWNSHIP & RANGE	ELEVATION	RECORD		MAXIMUM PRECIPITATION		MINIMUM PRECIPITATION		MEAN ANNUAL	YEARS OF RECORD
							YEAR BEGN	YEAR END	MAX. ANNUAL	YEAR OCCUR	MIN. ANNUAL	YEAR OCCUR		
U-03.F4	6149-00	NEUBURY PARK 4 SW	34-09-00	118-58-00	01N/20W-5	238	1968	1976	462.3	1968	308.7	1976	375.4	3
	6149-01	NEUBURY PARK ACADEMY	34-11-46	118-58-05	01N/20W-5	247	1965	1967	367.9	1966				
U-03.F5	6149-31	NEUBURY PARK-HECKMAN	34-10-40	118-55-17	01N/20W-5	216	1940	1946	880.6	1942	298.0	1942	468.3	7
	5825-00	MOORPARK 3 SE	34-15-23	118-50-53	02N/19W-5	194	1965	1976	576.6	1969	162.3	1976	376.3	5
	3826-51	MOORPARK 1 SSE	34-16-42	118-52-36	02N/19W-5	158	1975	1976	321.9	1975	180.8	1976	251.4	2
U-03.F6	6941-00	PIRU 3 SSE-SIMI-TELE-HRRG	34-21-54	118-46-41	03N/18W-5	860	1971							
	8784-03	TAPO CANYON	34-22-54	118-42-41	03N/18W-5	465	1976	1977	322.1	1977	288.4	1976	305.3	2
U-03.F7	0495-03	WARD RESERVOIR	34-14-04	118-49-05	02N/19W-5	314	1966	1976	582.8	1969	175.4	1976	368.9	5
	4673-50	LAKE BARD	34-14-32	118-49-41	02N/19W-5	308	1976	1977	232.8	1977	175.4	1976	204.1	2
	4804-70	LAS LLAJAS CANYON	34-18-05	118-41-24	03N/17W-5	351	1975	1976	346.3	1975	254.3	1976	300.3	2
	7973-00	SANTA SUSANA 4 NNE-C.V.RM	34-19-40	118-41-54	03N/17W-5	463	1975	1976	363.7	1975	288.4	1976	326.1	2
	7973-02	SANTA SUSANA AIRPORT	34-18-15	118-42-29	02N/17W-5	293	1969		482.6	1969				
	8256-00	SIMI	34-16-00	118-47-00		235	1976		257.7	1976				
	8258-00	SIMI 3E-VC FIRE STA -HRRG	34-16-17	118-44-05	02N/18W-5	280	1965	1975	308.7	1975				
	8258-10	SIMI VALLEY-FORSON RANCH	34-15-44	118-39-32	02N/17W-5	328	1958	1962	869.6	1958	167.7	1961	433.3	5
	8258-30	SIMI HILLS-BURRO FLAT	34-13-43	118-42-32	02N/18W-5	333	1963	1977	720.4	1969	193.0	1972	402.9	15
	8261-00	SIMI SANITATION PLANT	34-17-00	118-49-60	02N/18W-5	201	1977	1978	774.8	1978	309.8	1977	542.3	2
	8700-00	SUSANA KNOX-VCFO FIRE S	34-15-40	118-40-10	02N/17W-5	331	1957	1977	829.9	1958	161.9	1961	396.3	17
	8784-01	TAPO CITRUS ASSN-SIMI VAL	34-17-12	118-43-09	02N/18W-5	308	1954	1966	653.0	1958	128.0	1961	329.0	11
	8784-06	TAPO WATER CO	34-17-53	118-43-16		329	1965	1966						
U-03.F8	1970-15	COMEJO RCH 2-THOUSAND OAK	34-11-48	118-51-36	01N/19W-5	244	1940	1957	858.9	1941	148.8	1948	361.7	18
	8905-00	SANTA SUSANA 4 FIRE STA	34-10-43	118-51-00	01N/19W-5	244	1957	1977	810.0	1969	141.0	1961	369.2	17
	8905-01	THOUSAND OAKS 2N-HILLSDAL	34-12-16	118-50-16	01N/19W-5	279	1976		229.4	1976				
	8907-00	THOUSAND OAKS	34-10-44	118-51-01	01N/19W-5	245	1977		304.6	1977				
U-04.A1	3345-11	GARRAPATA CANYON	34-07-44	118-34-42		431	1965	1969	1082.1	1969	439.2	1968	731.3	4
	3345-00	GARRAPATA CANYON-PEELER R	34-07-03	118-35-02	01N/16W-5	302	1931	1948	1320.0	1941	245.1	1948	607.1	18
	6416-11	OLD TOPANGA	34-06-29	118-37-41		308	1952	1978	1371.0	1978	200.0	1961	584.7	24
	7946-30	SANTA MARIA CREEK	34-07-44	118-34-42		431	1950	1978	1239.1	1978	186.1	1961	484.0	27
	8963-03	TOPANGA CYN OUTLET-DAVIS	34-02-58	118-34-46	01S/16W-5	23	1965	1969	593.7	1967	420.0	1966	483.3	3
	8963-15	TOPANGA - DE WITT	34-07-20	118-35-29	01N/16W-5	320	1952	1956	1076.3	1952	351.2	1953	566.3	5
	8967-00	TOPANGA PATROL STATION	34-05-03	118-35-37	01S/16W-5	227	1931	1980	1407.2	1978	227.6	1961	639.8	48
	8967-50	TOPANGA SUMMIT	34-08-23	118-36-00	01N/16W-5	463	1930	1944	1141.3	1941	334.5	1936	581.2	13
U-04.A5	4803-11	LAS FLORES CANYON	34-02-47	118-38-18		44	1965	1969	607.2	1969	349.3	1968	467.8	4
U-04.A6	1516-50	CARBON CANYON	34-02-18	118-38-56		15	1940	1979	925.1	1941	199.5	1961	406.9	39
U-04.B1	1901-00	COLD CREEK	34-05-37	118-39-22		402	1944	1968	1112.1	1952	228.4	1961	525.3	25
	5269-02	MALIBU BCH-DUNNE	34-02-00	118-42-42		49	1950	1978	736.4	1978	118.1	1961	366.4	28
	5269-03	MALIBU BCH WINTER CYN	34-02-02	118-41-30		5	1944	1948	500.0	1944	181.1	1948	322.6	4
	5269-15	MALIBU CRATER CAMP	34-04-47	118-41-57		143	1945	1953	1070.4	1952	263.0	1948	496.2	9
	5269-45	MALIBU LAKESIDE-READ	34-06-11	118-45-16	01S/16W-5	244	1930	1975	1289.4	1941	343.6	1964	648.8	21
	5790-12	MONTA NIDO	34-04-43	118-41-35	01S/17W-5	183	1939	1979	1238.6	1941	184.4	1961	537.9	40
	9589-01	WEST SADDLE PEAK-MALIBU	34-04-28	118-41-19	01S/17W-5	271	1930	1944	1235.3	1941	286.3	1940	636.2	14
U-04.B2	3943-73	MIDDEEN HILLS	34-10-04	118-40-63		346	1977		363.1	1977				
U-04.B3	3603-06	GRIFFITH PK 100	34-08-02	118-17-18		183	1934	1966	1025.1	1941	134.3	1961	452.2	31
	6649-11	PAID COMADO CYN	34-09-40	118-44-08		305	1948	1974	767.0	1969	154.1	1961	380.3	22
U-04.B4	0043-50	AGOURA	34-08-08	118-45-68		244	1939	1979	1076.3	1941	155.7	1961	441.8	40
	5269-00	MALIBU-OIV MOOTS	34-08-08	118-45-08	01N/18W-5	259	1965	1969	907.8	1969	419.3	1968	664.0	3
	8088-01	SEMIHOLE HOT SPRGS-MALIBU	34-06-25	118-47-30	01S/18W-5	267	1930	1976	1209.3	1941	201.7	1961	550.3	42
	9027-21	TRIUNTO CANYON	34-07-50	118-47-52		251	1942	1964	895.6	1952	152.4	1961	405.8	22
U-04.B5	9562-50	WESTLAKE VILLAGE	34-08-19	118-49-05		270	1976	1977	313.9	1977	218.1	1976	266.0	2
U-04.B6	4706-11	LAKE SHERWOOD	34-09-00	118-53-59		317	1935	1977	1056.2	1941	171.7	1961	470.7	41
U-04.C1	2050-01	CORRAL CANYON	34-02-43	118-44-32		396	1950	1964	960.2	1958	187.0	1961	479.7	15
U-04.C2	6177-21	NEWTON CYN-MALIBU-CARTER	34-05-00	118-47-39	01S/18W-5	533	1931	1936	759.9	1935	336.1	1933	600.7	4
U-04.C3	2867-01	ESCONDIDO CYN-PA-S-MALIBU	34-02-55	118-46-25	01S/18W-5	320	1932	1976	1139.9	1941	215.9	1948	516.9	28
U-04.C4	9990-12	ZUMA CYN PS	34-01-10	118-47-46		351	1941	1979	932.3	1978	114.0	1961	398.4	37
U-04.C6	4827-00	LATIGO CANYON BEACH	34-05-35	118-48-52	01S/19W-5	518	1940	1978	1366.5	1941	269.6	1961	620.3	38
	9990-02	ZUMA BEACH	34-01-15	118-49-42		5	1931	1979	691.0	1952	129.3	1961	372.8	35
U-04.C7	9990-11	ZUMA CYN-DARLEY	34-04-58	118-49-38		457	1935	1979	1460.0	1941	232.8	1961	667.0	43
	4867-00	LECHUZA PATROL STN	34-04-38	118-52-47	01S/19W-5	488	1933	1980	1306.4	1941	217.8	1961	582.9	45
	5098-11	LOONIS RCH ALDER CR	34-20-55	118-02-55	03N/11W-5	1311	1930	1979	1030.2	1941	46.3	1974	458.9	49
	7255-51	RATTLESNAKE CANYON	34-05-00	118-51-55		393	1954	1978	1089.9	1978	216.7	1961	556.4	25
	7354-30	REEDER RCH-ARROYO SEQUIT	34-48-00	118-52-00	01S/19W-5	274	1931	1934	486.2	1932				
	9003-01	FRANCAS BEACH	34-01-50	118-50-32		5	1965	1969	622.9	1969	111.1	1968	372.3	4
	9270-80	VAUGHAN RANCH-ST MONICA M	34-03-28	118-52-04	01S/19W-5	497	1930	1932	507.5	1931				
	9390-02	ZUMA BEACH	34-01-15	118-49-42		5	1973	1975	437.5	1973	350.1	1975	393.8	2
U-04.D2	5269-21	MALIBU-DECKER RANCH	34-04-08	118-53-37	01S/19W-5	328	1951	1953	1003.0	1952	280.0	1951	552.2	3
U-04.D4	6189-20	NICHOLAS CYN	34-02-52	118-54-57		104	1965	1976	504.3	1969	248.1	1976	400.2	6
U-04.D6	2330-30	ARROYO SEQUIT-MASON ESTAT	34-05-13	118-53-27	01S/19W-5	5	1931	1948	1201.5	1941	382.8	1933	596.4	16
	2314-80	DEALS FLATS - S.M. MTNS	34-05-16	118-58-05	01S/20W-5	436	1975		454.9	1975				
U-05.A1	5193-30	LUNADA BAY	33-46-37	118-25-15		76	1965	1977	362.7	1969	158.2	1976	278.9	7
	6863-12	PALOS VERDES HILLS FS	33-45-25	118-21-11		389	1947	1978	722.1	1978	88.9	1964	324.4	29
	6863-14	PALOS VERDES HILLS HP	33-45-40	118-22-20		306	1966	1969	638.0	1969	342.6	1968	487.5	3
	7036-11	POINT VICENTE L.H.	33-44-30	118-24-38	05S/15W-5	38	1930	1979	643.2	1941	99.2	1964	269.4	48
	7092-21	PORTUGUESE BEND	33-44-20	118-21-30		46	1952	1963	486.6	1958	87.1	1961	264.6	12
	7534-11	ROLLING HILL E C GATE	33-44-12	118-19-57		290	1952	1963	608.0	1958	155.7	1959	348.5	12
	7534-12	ROLLING HILL W C GATE	33-44-52	118-24-29		0	1952	1962	490.7	1958	104.7	1961	262.0	11
	9701-02	WILMINGTON-2	33-47-27	118-15-30		12	1930	1977	721.0	1941	96.6	1961	319.3	43
U-05.A2	0052-24	ALAMITOS BAY-LONG BEACH	33-45-13	118-07-51	05S/12W-5	5	1940	1977	674.0	1941	83.0	1961	274.6	33
	1556-29	CARSON FIRE STATION	33-52-04	118-15-45		28	1976	1977	223.7	1977	201.5	1976	212.6	2
	1954-03	COMPTON-AMER BEET SUGAR C	33-50-26	118-13-11	04S/13W-5	10	1973		492.8	1973				
	2465-21	DOMINIQUEZ HILLS	33-51-37	118-14-01		59	1930	1958	717.4					

APPENDIX D
CALIFORNIA WIND STATION INDEX

TABLE 1. WIND SUMMARIES AVAILABLE FOR CALIFORNIA
from Goodridge (1978)

STATION NAME	LAT	LONG	EL M	INST HGT	NO. OF OBS	START MO YR	END MO YR	SU 1/	TP 1/	MEAN MPS
ALAMEDA NAS	37 47	122 19	9	7	238965	01 45	12 72	2	1	3.83
* ALAMITOS BEACH	19 33 45	118 08	3		37240	12 52	06 60	14	9	2.71
ALHAMBRA	37 34 05	118 09	13	9	87152	09 52	07 69	14	9	1.56
ALHAMBRA	119 34 06	118 08	8	11	36861	06 70	12 74	14	9	1.78
ALTADENA	52 34 11	118 08	9	9	53276	02 53	01 63	14	9	1.60
ANAHEIM APCD	71 33 49	118 25	224	14	128954	01 58	12 73	14	9	1.56
APPLE VALLEY SAWR	34 32	117 13	339		27986	12 60	11 65	2	1	
ARCATA CAA	40 59	124 06	69		7837	12 49	11 58	2	1	2.61
ARTESIA	82 33 52	118 05	15	8	28673	12 56	05 60	14	9	1.65
AUBURN AIRPORT	38 57	121 04	460		39625	01 34	12 38	2	1	
AZUSA	97 34 08	117 56	183	9	127521	04 60	12 74	14	9	1.78
BAKERSFIELD	35 25	119 03	151	6	23155	01 64	12 73	2	1	2.61
BAKERSFIELD MEADOW	35 25	119 03	151	18	43848	01 56	12 60	2	1	2.58
BAKERSFIELD MINTER	35 30	119 11	130		37875	10 41	01 46	2	1	2.67
BALDWIN PARK	47 34 05	117 58	115	15	57295	04 54	03 62	14	9	1.47
BEALE AFB	39 07	121 26	38		111333	08 43	12 70	2	1	2.58
BEAUMONT	33 56	116 56	790		29202	07 38	02 42	2	1	4.05
BELL	35 33 59	118 11	46	11	152439	09 52	12 56	14	9	2.63
BERKELEY LRL R4	37 52	122 15	290	12	40705	03 62	02 68	4	1	
BISHOP WRAS	37 22	118 22	1263	6	109147	01 48	12 72	2	1	3.83
BLUE CANYON WRAS	39 17	120 42	1610	9	92883	01 48	12 64	2	1	4.32
BLYTHE RCAP	33 37	114 43	119		43800	09 69	08 74	2	1	3.25
BROOKINGS ORE	42 03	124 18	46		673	01 37	03 42	8	6	
BUENA PARK	95 33 53	118 01	23	11	126272	03 59	12 74	14	9	2.00
BURRANK	34 12	118 22	221		43773	01 60	12 64	2	1	2.54
CAMBRIA	35 34	121 07	30		12159	06 43	10 44	2	1	3.29
* CAMP PENDLETON MC	33 18	117 21	19	26	23684	07 66	06 72	2	1	2.63
CANOGA PARK	67 34 12	118 36	244	8	159672	12 55	12 74	14	9	1.29
CASTLE AFB	37 22	120 34	54		260322	01 42	12 72	2	1	3.03
CENTRAL STONY	35 58	121 16	402		56842	64	70	5	1	
CHICO AAF	39 48	121 51	77		31535	05 42	12 45	2	1	3.74
CHINA LAKE	35 41	117 40	682	5	207031	01 45	12 72	2	1	3.65
* CHULA VISTA-BROWN	32 35	116 58	160		12852	04 45	05 55	2	1	
CLOVERDALE PEAK	38 53	123 00			12678	11 72	10 74	1	1	3.38
COALINGA	36 08	120 21	196		2532	01 32	12 32	2	1	
COMPTON	24 33 54	118 13	30	12	79341	12 54	04 66	14	9	1.87
COMPTON AP	112 34 04	118 15	30	9	74902	04 66	12 74	14	9	2.54
CONCORD	37 59	122 03	165			01 51	07 53	6	5	
CRESCENT CITY FAA	41 47	124 14	17		45662	10 49	12 54	2	1	4.14
CROWS LANDING NAS	37 25	121 06	40		1227	01 44	02 45	2	1	3.56
DAGGETT FAA	34 52	116 47	588		87556	01 55	12 64	2	1	5.03
DAVENPORT	37 00	122 11	30		7458	01 71	12 71	1	1	3.78
DESERT CENTER	33 45	115 20	165		6469	06 43	03 44	2	1	3.34
* DIABLO CANYON	35 13	120 49		10	17228	05 73	04 75	1	1	4.72
* DIABLO CANYON	35 13	120 49		76	17199	05 73	04 75	1	1	4.67
* DOMINGUEZ WATER80	33 50	118 14	9	9	97940	12 56	12 71	14	9	2.54
DONNER SUMMIT	39 19	120 20	2193	9	43763	01 34	12 38	2	1	

1/ See explanation at end of table.

TABLE 1. WIND SUMMARIES AVAILABLE FOR CALIFORNIA
(Continued)

STATION NAME	LAT	LONG	EL M	INST HGT	NO. OF OBS	START MO YR	END MO YR	SU 1/	TP 1/	MEAN MPS
DOWNEY	22 33 57	118 10	37	9	160585	05 53	12 74	14	9	1.91
EDWARDS AFB	34 55	117 54	706	4	86311	01 62	12 72	2	1	3.69
EL CENTRO NAAS	32 49	115 40	-13		121517	02 45	10 60	2	1	3.92
EL MONTE	49 34 05	118 02	85	9	69678	11 53	10 65	14	9	2.09
EL TORO MCAS	33 40	117 44	117	3	236944	01 45	12 72	2	1	2.45
ENCINO	86 34 10	118 30	235	12	131556	12 57	12 72	14	9	1.91
ESTRO	35 26	120 32	9		12722	01 31	12 36	2	1	2.05
EUREKA HUB PP	40 44	124 12	4		17351	01 66	12 67	1	1	4.27
EUREKA USWB	40 48	124 10	13	27	14510	07 30	12 36	2	1	3.16
FAIRVIEW HOSP	126 33 42	117 55	3	8	16656	02 72	12 73	14	9	1.29
FONTANA	66 34 05	117 30	332	24	139747	01 53	03 73	14	9	5.70
FORT BRAGG CASPER	39 28	123 45	230	6	17271	01 43	05 45	2	1	3.38
FORT ORD/FRITZSCHE	36 41	121 46	44	5	86943	04 60	12 70	2	1	2.89
FRESNO AIR TERM	36 46	119 43	100	6	181408	12 41	12 68	2	1	2.80
FRESNO CHANDLER	36 44	119 49	85				76	9	7	
GEORGE AFB	34 35	117 23	868	4	232810	01 42	12 72	2	1	3.78
GLENDALE AAF	34 09	118 18	141		22379	06 43	12 45	2	1	2.23
HAMILTON AFB	38 04	122 31	4	10	278159	39	70	2	1	2.45
HAWTHORNE	120 33 54	118 06	23	9	32544	10 71	12 74	14	9	1.78
HIGH POINT	35 57	121 14	566		54461	64	70	5	1	
HOLLYWOOD	27 34 06	118 20	76	12	159529	01 55	12 72	14	9	1.82
HOLLISTER NAS	36 53	121 24	61		1828	07 42	02 45	8	6	
HOLTSVILLE NAS	32 50	115 16	18		1703	08 43	02 45	2	1	1.87
* HYPERION	84 33 53	118 27	3	12	29749	01 57	06 60	14	9	3.43
* IMPERIAL BEACH NAS	32 34	117 07	7	5	167334	01 45	12 70	2	1	2.98
INDIO-COACHELLA	33 41	116 10	-19		27948	01 37	08 40	2	1	
JENNER AAB	38 27	123 08	72		13567	06 43	05 45	2	1	4.67
JOLON	36 00	121 14	317	3	60306	07 64	70	5	1	
KLAMATH FALLS KING	42 09	121 44	1247	4	154817	01 48	05 70	2	1	2.45
LA CANADA FS	108 34 12	118 11	366	11	74990	05 65	12 73	14	9	1.47
LA HABRA	99 34 10	117 57	91	8	119089	08 60	12 74	14	9	1.51
LA VERN AP	94 34 05	117 47	305	11	137147	11 58	05 75	14	9	2.71
* LAGUNA BEACH WBO	33 32	117 47	61		43741	01 34	12 38	2	1	
LAKEVIEW ORE	42 11	120 21	811		12419	01 59	05 62	2	1	
LANCASTER	90 34 35	118 08	811	27	55943	10 57	05 64	14	9	3.69
LANCASTER	129 34 44	118 13	715	11	22307	05 74	12 76	14	9	5.65
LAS VEGAS NEV	36 05	115 10	573		32928	34	38	2	1	4.01
LEMOORE NAS	36 20	119 57	73	3	95872	07 61	06 70	2	1	2.40
LIVERMORE LLL	37 41	121 46	149			04 71	03 72	3	1	4.20
LIVERMORE 10 SSE	37 38	121 30	171		7061	01 71	12 71	3	1	8.00
LIVERMORE USWB	37 42	121 48	134		43692	01 34	12 38	8	6	
LIVERMORE 300 WOP	37 40	121 33	525	9	HRLY	10 72	09 73	3	3	6.32
* LONG BEACH NS	33 49	118 09	13	6	163549	01 49	12 72	2	1	2.49
* LOS ALAMITOS NAS	33 48	118 03	8	4	171926	01 49	12 69	2	1	2.45
LOS ANGELES WB	39 34 03	118 14	82	58	127007	08 50	06 64	14	9	2.67
* LOS ANGELES WBAS	33 56	118 23	37	6	153295	01 47	06 65	2	1	2.98
LOS ANGELES CAP75	34 03	118 14		26	174169	08 56	12 76	14	9	5.3

1/ See explanation at end of table.

TABLE 1. WIND SUMMARIES AVAILABLE FOR CALIFORNIA
(Continued)

STATION NAME	LAT	LONG	EL M	INST HGT	NO. OF OBS	START MO YR	END MO YR	SU 1/	TP 1/
LOS ANGELES CC	10334 05	118 18	152	14	96105	04 63	12 74	14	9 2
LOS ANGELES	118 33 55	118 18	15	9	30240	04 71	12 74	14	9 1
LOS ANGELES NORM	2634 03	118 18	30	12	95824	01 55	03 67	14	9 2
LOS ANGELES PICO	2534 03	118 22	30	12	142099	01 55	12 71	14	9 2
LOS ANGELES SP	68 34 06	118 14	60	A	16884	03 56	08 61	14	9 1
LOS ANGELES UCLA	2834 04	118 27	131	15	26387	04 54	05 59	14	9 1
LOS BANOS	37 04	120 53		11	8496	04 74	03 75	1	1 4
LYNWOOD	130 33 55	118 12	35	11	9240	12 74	12 74	14	9 2
* MALIBU FS	104 34 02	118 42	3	9	93360	12 63	12 74	14	9 2
MCCLELLFN AFB	38 40	121 24	26	4	283884	39	12 72	2	1 3
MEDFORD ORE	42 22	122 52	404		2920		74	2	1 2
MILPITAS	36 04	121 19	366	3		65	70	5	1
* MIRAMAR NAS	32 52	117 08	144	7	212054	07 47	06 72	2	1 2
MISSION HILLS	113			9	70114	12 66	12 74	14	9 2
MODESTO CAA	37 38	120 58	29		15321	01 40	09 41	2	1
MOJAVE NAS	35 07	118 09	842		32291	04 45	09 58	2	1
MONTAGUE FAA	41 46	122 28	803	4	152521	10 53	12 65	2	1 2
MONTEREY NAF	36 36	121 52	51	2	154998	01 45	12 69	2	1 2
MONTEZUMA	38 05	121 49	3	10	7417	05 70	04 71	1	1 5
MONTROSE	56 34 12	118 14	366	9	44823	03 53	03 62	14	9 2
MOSS LANDING	36 48	121 46			33589	03 69	02 72	1	1 4
MT SHASTA CAA	41 17	122 18	988		37577	01 34	12 38	2	1
MT VACA	38 24	122 06			15103	11 72	10 74	1	1 6
NAPA	38 13	122 17	17		19547	66	68	6	5
NEEDLES	34 46	114 37	280		43794	69	74	2	1 3
NELLIS AFB	36 15	115 02	573	4	230638	03 42	12 72	2	1 2
NEWHALL	115 34 22	118 33	387	9	54443	09 69	12 75	14	9 1
* NEWPORT BEACH	63 33 36	117 54	3	8	147531	08 54	12 74	14	9 2
NORTON AFB	34 06	117 15	335		259005	01 43	12 72	2	1 1
NORTHRIDGE CSU	83 34 14	118 32	261	A	83768	01 57	09 66	14	9 1
NO HOLLYWOOD	43 34 10	118 25	274	9	82539	06 55	03 65	14	9 1
NORWALK	32 33 55	118 04	30		23781	07 52	02 59	14	9 1
OAKLAND AP	37 44	122 12	5	15	87672	01 51	12 60	2	1 3
* OCEANSIDE CAA	33 13	117 21	8		43761	01 34	12 38	2	1
ONTARIO	34 03	117 36	280		23378	49	55	2	1 4
OROVILLE RS	39 32	121 34	91			07 68	07 72	2	5
* OXNARD AFB	34 13	119 04	25		143280	04 44	12 67	2	1 2
PALMDALE AP	34 38	118 05	768	9	109166	11 48	73	2	1 4
PALM SPRINGS AAF	33 54	116 33	128		24286	05 43	02 46	2	1 3
* PALO VERDES	1 33 45	118 10	457		12941	09 54	12 57	14	9 3
PASADENA FDEC	3110		240	12	92230	06 59	03 70	14	9 1
PASO ROBLES AP	35 40	120 38	246		141450	48	64	2	1 2
PESCADERO	37 12	122 22	141		11513	06 43	09 44	2	1 4
PITTSBURG DOW	38 01	121 51	3	A		67	76	8	1 3
PITTSBURG POWER PL	38 04	121 54	6	10	23568	12 70	11 73	1	1 4
POINT ARFNA CG	38 55	123 43	79		8251	01 37	02 42	2	1 6
POINT ARENA	38 56	123 42	73	5		08 70	07 72	1	1 6

1/ See explanation at end of table.

TABLE 1. WIND SUMMARIES AVAILABLE FOR CALIFORNIA
(Continued)

MEAN MPS	STATION NAME	LAT	LONG	EL M	INST HGT	NO. OF OBS	START MO YR	END MO YR	SU 1/	TP 1/	MEAN MPS
1.36	* POINT ARGUELLO	34 35	120 38	113		35036	59	63	2	1	
.91	* POINT FERMIN	33 43	118 17	11		9392	09 38	09 42	2	1	2.94
.58	* POINT HUENEME	34 09	119 12	5		7120	08 38	12 41	2	1	3.29
.05	POINT MONTARA	37 32	122 31	20		10829	02 38	11 41	2	1	3.56
.91	* POINT MUGU	34 07	119 07	4	4	109069	64	72	2	1	2.89
.56	* POINT PIEDRAS BLAN	35 40	121 17	21	5	6525	06 38	02 42	2	1	4.76
.90	POINT REYES	38 00	123 00	79		12466	02 38	02 42	2	1	3.52
.00	PAMONA APCO	109 34 04	117 45	259	11	83455	06 65	12 74	14	9	1.42
.23	POTERRO HILL	38 12	121 58	126		34938	01 35	12 38	2	1	
.25	PUENTE	48 34 01	117 59	96	11	38763	02 55	03 60	14	9	1.38
	RANCHO SECO	38 34	121 07	52	10	25893	01 74	12 76	15	1	3.23
	REDDING WBAS	40 34	122 24	220		79033	07 29	12 38	2	1	
.27	* REDONDO KING H	12 33 50	118 24	3	11	74436	04 66	12 74	14	9	2.80
.23	RENO AP	39 30	119 47	1342		43848	01 56	10 59	2	1	2.63
	RENO STEAD AFB	39 40	119 52	1541	4	140000	12 57	03 66	2	1	3.03
	RESEDA	107 34 12	118 32	226	11	84084	05 65	12 74	14	9	1.34
.71	RICE AFB	34 04	114 50	269		3477	06 43	03 44	2	1	3.69
.49	RIVERA	81 33 58	118 06	46	9	154626	01 57	12 74	14	9	1.91
.12	RIVERSIDE/MARCH	33 54	117 15	466		286219	01 33	12 67	2	1	2.31
.27	SACRAMENTO EX AP	38 21	121 30	5	6	87672	01 56	12 60	2	1	4.14
.01	SACRAMENTO/MATHER	38 34	121 18	29	4	227840	04 56	12 67	2	1	3.07
	SALINAS AAB	36 40	121 72	22		28775	08 41	12 44	2	1	3.60
.54	SAM JONES	35 53	121 08	445	3	52755	65	70	5	1	
	SAN CLEMENTE IS	32 57	118 32	276	5	78600	63	72	2	1	3.25
.78	SANDBERG	34 45	118 44	1377	9	59682	01 32	12 38	2	1	6.81
.98	* SAN DIEGO NAS	32 42	117 12	7	9	238011	01 45	12 72	2	1	2.71
.65	* SAN DIEGO LINDBERG	32 44	117 10	6	6	87672	01 51	12 60	2	1	2.80
.31	SAN DIMAS	59 34 12	117 48	290	9	18651	03 53	03 59	14	9	.98
.78	SAN FERNANDO	45 34 17	118 27	359	8	34777	09 55	02 60	14	9	2.09
.69	SAN FRANCISCO AP	37 37	122 23	27	6	150260	48	12 65	2	1	4.85
.74	SAN JOSE	37 22	121 55	17		87648	01 37	12 47	2	1	
.96	SAN LUIS OBISPO	35 15	120 40	61		17786	05 51	04 56	2	1	
.34	SAN MIGUEL ISLAND	34 03	120 21	168		3440	02 40	06 42	2	1	7.21
	SAN NICOLAS ISLAND	33 15	119 28	153	4	112227	01 45	12 72	2	1	5.07
.05	SAN PABLO	37 59	122 21	79		18487	07 29	02 39	8	6	3.25
	SANTA ANA OCAP	65 33 40	117 53	47	9	68841	02 55	01 72	14	9	2.00
.21	SANTA ANA MCAF	33 42	117 50	19	3	130408	60	12 72	2	1	2.36
.49	* SANTA BARRARA CAA	34 26	119 50	4		43795	60	64	2	1	3.92
.92	SANTA CATALINA AV	33 22	118 29	135		6308	06 43	02 44	2	1	2.89
.07	SANTA CATALINA BS	33 24	119 21	498		7522	07 39	02 42	2	1	
.38	* SANTA MARIA	34 57	120 25	70	12	17544	01 48	12 58	2	1	3.12
.08	SANTA ROSA AAS	38 25	122 45	32		23718	04 43	12 45	2	1	2.58
.94	SANTA ROSA ISLAND	33 55	120 07	455		6261	06 43	02 44	2	1	7.48
.12	SAUGUS CAA	34 24	118 33	368		43747	01 34	12 38	2	1	
.49	SAUGUS SCE	91 34 24	118 32	355	14	112820	03 58	08 71	14	9	2.31
.27	SILVER LAKE	35 20	116 06	276		8732	08 40	07 41	2	1	

1/ See explanation at end of table.

TABLE 1. WIND SUMMARIES AVAILABLE FOR CALIFORNIA
(Continued)

STATION NAME	LAT	LONG	EL M	INST HGT	NO. OF OBS	START MO YR	END MO YR	SU 1/	TP 1/
SISKIYOU SUMMIT OR	42 05	122 34	1371		43774	34	38	8	6
SLIDE MTN. NEVADA	38 18	119 53	2941	2	12137	01 68	12 70	16	1
SOUTHEAST FARALLON	37 42	123 00	12		16646	06 35	06 42	8	6
STOCKTON	37 54	121 15	8		47320	01 41	12 45	2	1
SUN VALLEY	44 34 13	118 22	305		34400	08 52	06 60	14	9
SUNNYVALE MOFFETT	37 25	122 03	6	4	238814	01 45	12 72	2	1
SUSANVILLE	40 23	120 33	1265	13	4134	03 37	02 40	8	6
TAFT GARDENER FLD	35 07	119 18	133		28266	12 41	02 45	2	1
TEHACHAPI	35 08	116 26	1210		18706	11 42	12 44	2	1
TEMPLE CITY	50 34 07	118 03	122	12	26780	06 56	06 60	14	9
* TERMINAL ISLAND	5 33 46	118 13	3	15	164901	08 52	12 74	14	9
THE GEYESERS	38 50	122 37	509		13844	11 72	10 74	1	1
THERMAL FAA	33 38	116 10	-35		43823	01 57	12 61	2	1
TORRANCE	9 33 53	118 18	3		117569	08 52	09 70	14	9
TRAVIS AFB	38 16	121 56	18	4	254948	43 57	12 72	2	1
TWENTY NINE PALMS	34 08	116 02	542		6567	07 42	03 43	2	1
UKIAH	39 07	123 17	427		87495	01 55	12 64	2	1
VALENCIA	121			8	25176	10 71	12 74	14	9
* VANDENBERG AFB	34 43	120 34	116	4	115324	51	12 70	2	1
* VANDENBERG BOAT ST	34 43	120 37	24	16	9313	66	67	2	1
VAN NUYS ANGB	34 13	118 30	242		237378	10 61	08 62	2	1
VAN NUYS LAVC	105 34 11	118 26	216	9	28665	03 64	08 67	14	9
* VENICE	14 33 59	118 29	3	14	150177	08 54	12 73	14	9
VISALIA	36 20	118 17	108		8783	01 32	12 32	2	1
WALNUT LACRD	106 34 00	117 51	163	9	77901	01 65	12 73	14	9
WASCO	35 44	119 32	70	9		03 74	02 75	28	1
WASCO	35 44	119 32	70	46		03 74	02 75	28	1
W LOS ANGELES	102 34 03	118 26	27	11	95838	11 62	12 73	14	9
WILLIAMS	39 06	122 09	39	9	43777	01 34	12 38	2	1
* WILMINGTON	4 33 46	118 16	3		44392	01 53	02 61	14	9
WILMINGTON REF	6		3		28003	11 51	02 59	14	9
WHITTIER	114 33 56	118 02	107	9	38705	08 69	12 73	14	9
YUMA AP ARIZONA	32 40	114 36	63	6	160705	49	71	2	1

FOOTNOTES ARE LOCATED AT THE END OF TABLE 2

TABLE 2. NONSUMMARIZED WIND RECORDS FOR 372 CALIFORNIA STATIONS
from Goodridge (1978)

MEAN MPS	STATION NAME	LAT	LONG	EL M	INST HGT	NO.OF OBS	START MO YR	END MO YR	SU 1/	TP 1/
	AIRLINE	36 35	121 42		10		08 72	08 73	21	08
8.38	ANACAPA ISLAND	34 01	119 22	52			01 46	01 76	9	7
4.54	ANAHEIM 31	33 48	117 51	229	9	1772	09 52	03 58	14	9
3.52	ARROYO DEL VALLE	37 33	121 40	195					13	
2.49	* ARROYO GRANDE	35 16	120 40		10		05 74	10 76	21	08
2.71	ARVIN-EDISON WSD	35 19	118 56		10		08 75	08 77	22	08
	ATWATER	37 21	120 36	48			08 30	09 33	9	7
2.31	AVALON	33 20	118 20	3			01 61	12 68	9	7
3.74	AVON POWER PLANT	37 24	121 56	3					13	
2.40	AZUSA 60	34 08	117 56	190	9	5366	09 55	03 62	14	9
5.07	BAKERSFIELD CC	35 24	118 56		10		08 75	08 77	22	08
5.07	BAKERSFIELD CHESTE	35 21	119 01		10		08 75	08 77	22	08
	BAKERSFIELD ST COL	35 21	119 06		10		08 75	08 77	22	08
1.96	BALDY MESA	34 20	117 20	1113			02 30	01 34	9	7
5.30	BARCROFT LAB	37 35	118 14	3801					27	7
2.85	BEAR VALLEY	34 31	117 13	893		2798	60	65	2	1
3.38	BEAUMOUNT	33 56	116 57	792			05 29	76	9	7
2.31	BENECIA ACPD	38 03	122 09	12	9		02 70	07 76	10	7
3.12	BERKELEY CT	37 52	122 19	2	9		06 74	07 76	11	8
4.05	BERKELEY ST HEA D	37 53	122 18	10					13	
2.00	BLAIRSDEN CT	39 46	120 36	1341	10		09 73	03 74	18	8
1.38	BLUNTS REEF CG	40 26	124 30	8			49	76	9	7
2.89	BODEGA BAY	33 19	123 03	3				76	9	7
	BONITA	32 39	117 11		10		03 73	05 74	26	08
2.18	BROWN FIELD	32 34	116 59	155	10		12 72	11 73	26	08
	BUELLTON	34 36	120 12		10		01 75	10 76	21	08
	BURRANK APCD 100	34 11	118 29	189	9	11029	04 62	12 74	14	9
1.47	BURLINGAME ACPD	37 35	122 21	12	13		03 73	07 76	10	7
	BURNEY	40 53	121 40	953			06 42	76	9	7
2.45	CAMARILLO	34 17	119 03	128	10		02 72	03 73	32	8
1.60	* CABRILLO BEACH	33 43	118 17	8				76	9	7
1.74	CAMARILLO CT 36	34 13	119 01	37	10		05 74	09 77	32	8
3.43	CAJON	34 18	117 28	933			07 43	06 46	9	7
	CAJON HMS	34 19	117 29	951	11		09 73	08 77	23	8
	CAMP KEARNEY	32 52	117 07	146			08 42	04 45	9	7
	CAMPBELL CT	37 15	121 57	82	9		02 72	04 73	11	8
	CAMPO	32 37	116 28	802			01 50	76	9	7
	CAPELL SCH CT	38 23	122 12	250	9		06 73	11 74	11	8
	CARLSBAD	33 08	117 17	100			08 59	76	9	7
	CARMEL	36 36	121 54		10		07 74	11 76	21	08
	CARMEL	32 56	117 14		10		06 73	09 74	26	08
	CARQUINEZ BG	38 04	122 14	100			03 29	05 31	9	7
	CARSON 189 HARBOR	33 51	118 16	6	10		06 73	09 77	32	8
	CASITAS	34 23	119 23		10		04 75	03 76	21	08
	CASPER FIELD	39 28	123 45	229			06 43	05 45	9	7
	CASTROVILLE	36 46	121 45	5					2	7

1/ See explanation at end of table.

TABLE 2. NONSUMMARIZED WIND RECORDS FOR 372 CALIFORNIA STATIONS
(Continued)

STATION NAME	LAT	LONG	EL M	INST HGT	NO.OF OBS	START MO YR	END MO YR	SU 1/	TP 1/
CATALINA ISLAND	33 24	118 25	482				76 9	7	
CHATSWORTH CT	34 17	118 17	366	10		04 72	03 75	32 8	
CHECK 42	34 55	118 35	945			05 76		12 7	
CHICO	39 48	121 51	83			07 48	76 9	7	
CHINA GRADE	35 26	118 59		10		08 75	08 77	22 08	
CHINO	33 58	117 38	211				76 9	7	
CHINO CT	33 59	117 39	192	10		06 75	09 77	32 8	
CHP	36 36	121 41		10		08 73	12 74	21 08	
CLAREMONT BASELINE	34 07	117 44	411	10		03 73	09 77	32 8	
COALINGA	36 08	120 22	206			05 28	06 57	9 7	
COLTON	34 04	117 18	294	11		06 75	08 77	23 8	
COMPTON CT 45	33 53	118 11	18	10		04 76	10 76	32 8	
CONCORD ACPD	37 56	122 01	32	18		02 70	07 76	10 7	
CONCORD BUCHANAN	37 59	122 03	7			06 28	76 9	7	
CONCORD PSS	38 03	122 01	12				76 9	7	
CONTRA COSTA PP	38 01	121 47	3					13	
CORNING	39 56	122 10	87			33	36 9	7	
COSTA MESA CT	33 38	117 56	30	10		09 72	04 74	32 8	
CRAZY HORSE	36 48	121 38		10		12 72	10 74	21 08	
CREST VIEW HMS	37 44	118 58	2438	10		04 74	05 75	24 8	
CROCKETT ACPD	38 02	122 07	84	7		02 70	07 76	10 7	
CROOKED CREEK LAB	37 30	118 11	3094					27 7	
CUDDEBACK	35 16	117 26	864			07 63	12 68	9 7	
CULVER CITY CT 21	33 59	118 22	76	10		12 72	03 75	32 8	
CULVERCITY CT 20	34 00	118 25	9	10		12 72	09 77	32 8	
CUPERTINO CT	37 20	122 03	82	9		12 71	04 74	11 8	
DAVIS POINT	38 03	122 16	18				76 9	7	
DELTA	40 57	122 26	366			02 40	09 44	9 7	
DELTA PUMP PLANT	37 57	121 41	8			74		12 7	
DIDO-ESCONDIDO	33 07	117 06		10		06 73	12 74	26 08	
DONNER SUMIT	39 19	120 20	2193			12 29	01 55	9 7	
EAST SAN FRANCISCO	37 44	122 21	8	14		02 70	07 76	10 7	
DEVERS SUBSTATION	33 56	116 33	274						
EL CENTRO NAS	32 50	115 40		10		01 55	10 60	26 08	
EL SERENO CT	34 05	118 10	152	10		07 72	01 75	32 8	
EL MONTE AP 111	34 05	118 02	101	11	4898	10 65	08 71	14 9	
* EL SEGUNDO SCE 85	33 55	118 26	3		2914	01 56	06 60	14 9	
ERRECA	32 42	117 01		10		06 73	03 75	26 08	
ETIWANDA CT	34 08	117 33	104	10		06 75	09 77	32 8	
FAIR OAKS	38 39	121 18	52	10		01 76	01 77	20 08	
FAIRFIELD CT	38 13	122 08	2	10		06 73	01 75	25 8	
FELICITA	33 06	117 05		10		03 73	03 75	26 08	
FILLMORE CT 23	34 24	118 56	119	10		03 73	05 75	32 8	
FONTANA	34 06	117 25	396			05 31	11 45	9 7	
FORT BRAGG	39 27	123 48	23		7612	01 37	11 42	8 6	
FORT JONES	41 32	122 52	833			11 39	12 41	9 7	

1/ See explanation at end of table.

TABLE 2. NONSUMMARIZED WIND RECORDS FOR 372 CALIFORNIA STATIONS
(Continued)

STATION NAME	LAT	LONG	EL M	INST HGT	NO.OF OBS	START MO YR	END MO YR	SU 1/	TP 1/
FREMONT ACPD	37 32	121 58	18	8		02 70	07 76	10	7
FREMONT CT	37 34	121 57	9	9		01 72	07 76	11	8
FRESNO	36 46	119 43	101			88	76	9	7
FRESNO DORABELLA/1	37 07	119 19		10	35416	08 74	06 75	22	08
FRESNO HAMMER F	36 47	119 42	102			12 41	12 45	2	1
FRESNO HMS	36 46	119 50		10		08 75	10 76	22	08
FRESNO IRR DIST	36 46	119 46		10		08 75	03 77	22	08
FRESNO SAAW AVE	36 49	119 50		10		10 75	10 76	22	08
FRESNO ST UN	36 49	119 45		10		08 75	02 77	22	08
FRESNO 41/99	36 43	119 47		10		08 75	02 77	22	08
FRESNO 168/720	37 04	119 20		10		06 74	06 75	22	08
FRESNO 168/830	37 05	119 18		10		06 74	06 75	22	08
FRESNO 180/	36 44	119 42		10		08 75	10 76	22	08
FULLERTON	33 52	117 58	30			06 61	76	9	7
GILLESPIE FIELD	32 50	116 58	113	10		05 72	04 73	26	08
GILROY ACPD	37 01	121 34	55	6		02 70	07 76	10	7
GILROY CT	37 00	121 30	52	9		06 72	07 76	11	8
GLENDALE CT 32	34 09	118 08	372	10		12 73	02 75	32	8
GLENDALE CT	34 08	118 16	137	10		06 75	09 77	32	8
GOFFS	34 50	114 43	791			03 32	05 35	9	7
GOLDEN GATE BRIDGE	37 59	122 29						11	07
GRANADA HILLS CT	34 17	118 32	332	10		10 72	09 77	32	8
GROSSMONT	32 47	117 00	195	10		05 72	05 73	26	08
GULF ATOMIC	32 54	117 13		10		11 72	03 73	26	08
HALF MOON BAY	37 30	122 30	11			06 48	12 68	9	7
HALF MOON BAY CT	37 28	122 26	9	9		10 71	07 76	11	8
HALF MOON BAY	37 28	122 26	1					13	
HARBOR CITY PCH	33 46	118 18	9	10		09 72	04 74	32	8
HAWTHORNE	33 55	118 20	19			01 63	76	9	7
HAYWARD	37 39	122 07	15				76	9	7
MERCULES CT	38 01	122 17	8	9		05 73	06 76	11	8
HIGHLAND PARK CT	34 07	118 08	174	10		04 73	01 75	32	8
HIGHLAND PARK 31	34 07	118 14	140	10		12 73	02 75	32	8
HOLLISTER	36 53	121 24	114			08 28	08 59	9	7
HOLLISTER	36 54	121 22		10		02 75	08 77	21	08
HOLLYWOOD + VINE	34 06	118 19	140	10		12 73	02 75	32	8
HOT SPRINGS CREEK	37 00	118 50	1829	10		75	76	3	8
HUMBOLDT BAY	40 46	124 14	3				76	9	7
HUNTERS POINT PP	37 43	122 22	3					13	
IMPERIAL FAA	32 50	115 34	15			03 59	76	9	7
INDEPENDENCE	36 48	118 12	1202			94	12 44	9	7
JACKASS FLAT NEV	36 49	116 16	1130	29		05 56	02 62	7	1
JACUMBA	32 38	116 11	873			01 32	03 39	9	7
JAMACHA	32 45	116 56		10		09 73	04 75	26	08
KEELER	36 35	117 50	1107			91	94	9	7
KERN CO MAINT YD	35 19	119 02		10		08 75	08 77	22	08

1/ See explanation at end of table.

TABLE 2. NONSUMMARIZED WIND RECORDS FOR 372 CALIFORNIA STATIONS
(Continued)

STATION NAME	LAT	LONG	EL M	INST HGT	NO.OF OBS	START MO YR	END MO YR	SU 1/	TF 1/
KERNVILLE	35 43	118 27	1087			09 38	04 47	9	7
KEYES CT	37 34	120 55	30	10		04 73	09 77	25	8
KING CITY	36 13	121 08	117			06 28	04 47	9	7
KIRKWOOD NORTH	38 42	120 05	2200	5		01 74	12 74	29	9
KIRKWOOD NORTH	38 42	120 05	2200	15		01 74	12 74	29	9
KIRKWOOD SOUTH	38 42	120 05	2200	5		01 74	12 74	29	9
KIRKWOOD SOUTH	38 42	120 05	2200	15		01 74	12 74	29	9
LANCASTER	117 34 41	118 08	719	30	39223	07 70	12 74	14	9
LANCASTER	34 45	118 13	716	9		10 59	12 68	9	7
LANCASTER	34 44	118 13	715				76	9	7
LAVERNE	34 05	117 47	305			07 65	76	9	7
LEBEC	34 50	118 52	1090			07 29	03 32	9	7
LINDA VISTA	32 53	117 05	152			08 36	05 40	9	7
* LINDBERGH FIELD	32 44	117 11	4	10		01 59	12 68	26	08
LITTLE ANTELOPE VA	37 01	118 53	2286	10		75	76	3	8
LITTLE RIVER	39 16	123 45	174			01 51	12 56	9	7
LIVERMORE 300 ECP	37 39	121 32	366	9	HRLY	10 72	09 73	3	4
LIVERMORE APCD	37 41	121 47	146	7		02 70	07 76	10	7
* LONG BEACH APCD	10134 05	118 11	18	12	104217	11 62	12 74	14	9
LOS ANGELES	74 34 03	118 16		9	14469	03 61	10 62	14	9
LOS ANGELES	34 03	118 27	94			877	76	9	7
LOS ANGELES CT 43	34 02	118 19	61	10		06 75	09 77	32	8
LOS ANGELES CT 44	34 02	118 18	61	10		02 75	10 76	32	8
LOS ANGELES MLD 23	34 03	118 18	30	11	29659	12 52	08 59	14	9
* LOS ALAMITOS NAS	2033 48	118 03	8	4	96277	08 52	02 71	14	9
LOS BANOS	37 06	120 51	31			05 28	08 36	9	7
LOS PINOS PK	33 44	116 45	1491			08 41	11 44	9	7
LOST HILLS	35 40	119 51	216			09 28	05 37	9	7
LYONS PEAK	32 45	116 44	1140			12 44	11 49	9	7
LYNWOOD CT	33 55	118 08	27	10		08 72	11 73	32	8
MAINTENANCE ST CT				9		02 73	01 75	11	8
* MALIBU SHERIFF 18	34 02	118 42	4	8	21237	03 53	03 59	14	9
MAMOTH LAKES	37 38	118 51	2174	10		11 74	05 77	24	8
MARTINEZ PP	37 24	121 56	3					13	
MARTINEZ TIDEWATER	38 02	122 08	9					13	
MARYSVILLE	39 06	121 34	22			03 47	76	9	7
MEDIAN	33 01	117 04		10		09 74	04 75	26	08
MENDOTA	36 40	120 17	53			05 28	08 36	9	7
MENLO PARK CT	37 30	122 08	2	9		11 75	07 76	11	8
MERCED	37 17	120 31	46			05 28	76	9	7
MINTER FIELD	35 31	119 11		10		08 75	08 77	22	08
* MIRAMAMAR NAS	32 52	117 08	200	10		01 55	12 64	26	08
MISSION HILLS CT	34 16	118 28	290	10		09 72	02 74	32	8
MONTEREY	36 35	121 51	67				76	9	7
MONTGOMERY FIELD	32 49	117 08	107	10		05 72	05 73	26	08
MOORPARK DONLON	34 16	119 00	134	10		02 72	03 73	32	8

1/ See explanation at end of table.

TABLE 2. NONSUMMARIZED WIND RECORDS FOR 372 CALIFORNIA STATIONS
(Continued)

STATION NAME	LAT	LONG	EL M	INST HGT	NO.OF OBS	START MO YR	END MO YR	SU 1/	TP 1/
MOORPARK GRIMES	34 16	118 56	131	10		02 72	03 73	32	8
MOORPARK SPRING	34 18	118 51	262	10		11 72	12 74	32	8
MOSS LANDING	36 48	121 48	5				76	9	7
MORAGA CT	37 51	122 12	290	9		05 73	03 74	11	8
MORGAN HILL CT	37 08	121 40	107	9		03 72	07 76	11	8
MT GIVEN	37 17	119 06	2806						
MT HAMILTON	37 20	121 39	1285			07 29	08 65	9	7
MOUNT HOPE	32 43	117 07		10		11 72	07 74	26	08
MTGIVENS	37 13	118 06	2806			68	75	31	9
MT LAGUNA	32 53	116 25	1893			10 41	02 50	9	7
MT SHASTA	41 19	122 19	1083			01 32	07 76	9	7
MT ST HELENA	38 40	122 38	1322					13	
MT TAMALPIAS	37 56	122 35	789	9					
MT TAMALPIAS	37 54	122 35	290			06 40	09 57	9	7
MT WILSON	34 14	118 04	1741			05 28	76	9	7
MOUNTAIN PASS	35 28	115 34	1464			12 30	08 37	9	7
NAVAJO	32 48	117 00		10		09 73	02 75	26	08
NAPA ACPD	38 19	122 18	12	7		03 72	07 76	10	7
NEEDLES	34 46	114 37	280			01 17	12 68	9	7
NEWBURY PARK 34	34 11	118 53	189	10		05 74	05 75	32	8
NEWBURY PARK 35	34 11	118 56	198	10		05 74	05 75	32	8
NEWHALL	34 24	118 33	370			01 39	08 49	9	7
NEWHALL SIERRA HWY	34 25	118 28	439	10		03 72	01 74	32	8
NEWPORT BEACH CT	33 38	117 46	61	10		12 72	04 74	32	8
NORCO	33 54	117 34	195	11		12 72	08 77	23	8
NOVATO CT	38 09	121 34	12	9		11 75	07 76	11	8
OCEANSIDE	33 13	117 21	3	10		11 73	03 75	26	08
* OCEANSIDE	33 14	117 25	8			08 28	01 52	9	7
* OCEANSIDE HARBOR	33 13	117 24	9				76	9	7
OILDALE HMS	35 25	119 03		10		08 75	08 77	22	08
OLEUM POWER PLANT	38 02	122 13	10					13	
ORANGE	32 45	117 06		10		06 72	05 73	26	08
ORINDA CT	37 51	122 08	305	9		01 72	05 73	11	8
OWENS LAKE	37 08	118 17	1215	10		06 73	07 74	24	8
PACIFICA CT	37 36	122 30	15	9		03 73	07 76	11	8
PACOIMA CT	34 17	118 24	354	10		10 72	04 74	32	8
PALMDALE AP	89 34 37	118 05	768	12	141738	08 52	04 74	14	9
PALO ALTO	37 27	122 09	17			05 28	03 32	9	7
PALO ALTO METRONIC	37 27	122 08	28					13	
PALOMAR AIRPORT	33 07	117 16		10		11 72	10 73	26	08
PASADENA	122 34 09	118 08	26	9	21912	06 72	12 74	14	9
PASADENA	116 34 08	118 07	29	11	16097	06 70	05 72	14	9
PASADENA CC	55 34 09	118 08	26	14	29624	09 55	06 59	14	9
PASADENA PALMETTO	34 09	118 09	250	10		07 72	10 77	32	8
PATROL	32 34	117 03		10		06 73	09 74	26	08
PEBBLY BEACH	33 20	118 19	6				76	9	7

1/ See explanation at end of table.

TABLE 2. NONSUMMARIZED WIND RECORDS FOR 372 CALIFORNIA STATIONS
(Continued)

STATION NAME	LAT	LONG	EL M	INST HGT	NO.OF OBS	START MO YR	END MO YR	SU 1/	TF 1/
PETALUMA CT	38 14	122 37	3	9		03 73	07 76	11	8
PIGEON POINT LS	37 11	122 24	7				76	9	7
PILLAR POINT	37 30	122 30	40				76	9	7
PIRU TELEGRAPH CT	34 24	118 48	198	10		03 73	05 75	32	8
PITTSBURG ACPD	38 02	121 54	2	8		07 70	07 76	10	7
PITTSBURG	38 01	121 51	8	8		56	65	8	6
PITTSBURG CT	38 01	121 52	15	9		05 73	06 76	11	8
PITTSBURG CT	38 01	121 56	9	9		01 73	10 75	11	8
PLEASANTON CT	37 42	121 54	99	9		04 74	07 76	11	8
POINT BLUNT LS	37 51	122 25	73				76	9	7
POINT BONITA LS	37 49	122 32	1				76	9	7
POINT LOMA	32 40	117 27	111				76	9	7
POINT PINOS	36 38	121 36	9				76	9	7
* POINT SAN LUIS	35 10	120 46	27			03 43	10 51	9	7
POINT SUR LS	36 18	121 54	111			03 43	01 46	9	7
POINT VINCENT	33 44	118 25	38					2	7
POTRERO PP	37 44	122 22	3					13	
RAINBOW	33 26	117 09	335	10		05 73	11 74	26	08
RAINER MESA	37 11	116 13	31	30				7	1
REAM FIELD NAS	32 34	117 07		10		01 62	12 70	26	08
RED BLUFF	40 09	122 15	105	18	131496	891	07 76	9	7
RED BLUFF	40 09	122 15	108	18	131496	31	48	8	6
REDDING	40 30	122 18	153				76	9	7
* REDONDO BEACH 79	33 51	118 23	19	24	33121	07 56	06 60	14	9
REDWOOD CITY ACPD	37 29	122 12	5	5		02 70	07 76	10	7
* REFUGIO	34 28	120 05		10		09 72	11 73	21	08
RICHMOND ACPD	37 57	122 21	16	7		03 72	07 76	10	7
RICHMOND CT	37 58	122 25	3	9		04 74	07 76	11	8
RICHMOND STD OIL	37 57	122 25	4					13	
RIO LINDA	38 41	121 31	15	10		01 76	01 77	20	08
RIO VISTA CG	38 09	121 42	12					2	7
RIVERSIDE	33 57	117 27	233			10 56	76	9	7
RIVERSIDE AP	33 57	117 26	256	11		06 75	08 77	23	8
ROMERO OVER LOOK	37 05	121 06	12			01 73		12	4
ROSEVILLE	38 46	121 17	58	10		01 76	01 77	20	08
SACRAMENTO	38 35	121 30	8			893	06 64	9	7
SAC JEFERSON BLVD	38 29	121 35	18	10		02 76	01 77	20	08
SAC MEADOWVIEW	38 30	121 27	15	10		01 76	01 77	20	08
SACRAMENTO CT	38 34	121 39	12	10		01 76	01 77	20	08
SACRAMENTO EX AP	38 31	121 30	7			07 28	07 76	9	7
SAC METRO AIRPORT	38 40	121 36	13	10		01 76	01 77	20	08
SACRAMENTO MET AP	38 42	121 36	7			09 67	07 76	9	7
SALTON	33 18	115 59		10		11 74	05 75	26	08
SALTON SEA	33 12	115 50	-69			01 43	09 45	9	7
SAN BERNARDINO	34 09	117 19	380	11		08 73	08 77	23	8
SAN CARLOS FAA	37 31	122 15	1				76	9	7
SAN DIEGO	32 43	117 10	18			888	02 40	9	7

1/ See explanation at end of table.

TABLE 2. NONSUMMARIZED WIND RECORDS FOR 372 CALIFORNIA STATIONS
(Continued)

STATION NAME	LAT	LONG	EL M	INST HGT	NO.OF OBS	START MO YR	END MO YR	SU 1/	TP 1/
SAN DIEGO BROWN	32 34	116 59	160				76	9	7
SAN DIEGO GILLESPIE	32 49	116 58	117				76	9	7
X SAN DIEGO LINDBER	32 44	117 10	9			07 29	76	9	7
SAN DIEGO MONTGOM	32 49	117 09	127				76	9	7
SAN FRANCISCO APCD	37 47	122 25		45		02 70	07 76	10	7
SAN FRANCISCO CG	37 45	122 42	8			48	12 68	9	7
SAN FRANCISCO CT	37 47	122 23	3	9		12 75	07 76	11	8
SAN FRANCISCO FOB	37 47	122 25	38			888	04 73	9	7
SAN FRANCISCO PG+E	37 46	122 27						13	
SAN JOSE ACPD	37 20	121 53	24	8		07 72	07 76	10	7
SAN JOSE RHV	37 20	121 49	41				76	9	7
SAN JOSE ST UN	37 24	121 56	29					13	
X S J CAPISTRANO CT	33 30	117 38	30	10		04 74	03 75	32	8
SAN LEANDRO CT	37 41	122 08	9	9		04 74	07 76	11	8
X SAN MATEO <i>15 mi N from</i>	33 23	117 35	23				76	9	7
X SAN ONOFRE N G S	33 24	117 36	27	20		12 64			9
X SAN PEDRO	8 33 43	118 16	1			04 55	03 73	14	9
SAN PEDRO	33 45	118 15	13		14692	09 35	02 45	8	6
SAN RAFAEL ACPD	37 58	122 31	3	8		02 70	07 76	10	7
SAN YSIDRO REAM	32 34	117 07	7		1870	43	45	8	6
SANTA ANA SNA	33 40	117 53	16			06 40	76	9	7
SANTA BARBARA CT	34 25	119 41		10		12 72	11 74	21	08
SANTA BARBARA SG	34 26	119 44		10		03 74	08 77	21	08
SANTA CRUZ	36 58	122 00	1				76	9	7
SANTA CRUZ MTS LMS	37 09	122 00	711					13	
X SANTA MONICA	34 01	118 27	53			05 61	76	9	7
SANTA ROSA	38 31	122 49	45			06 48	76	9	7
SANTA ROSA ACPD	38 27	122 43	8	8		07 72	07 76	10	7
SANTA ROSA CT	38 27	122 41	61	9		12 72	07 76	11	8
SANTEE	32 51	116 58		10		11 72	12 73	26	08
SCOTT ROAD	33 39	117 10	460	11		08 73	08 77	23	8
X SEAL BEACH CT	33 46	118 02	9	10		06 75	09 77	32	8
SEARS POINT CT	38 08	122 28	2	9		02 73	11 74	11	8
SEBASTOPOL CT	38 24	122 40	21	9		11 74	07 76	11	8
SEXTON SUMMIT ORE	42 36	123 22	1172		43394	34	38	8	6
SHANDON	35 39	120 22		10		01 74	03 75	21	08
SHAVER LAKE DAM	37 09	119 19		10		08 74	06 75	22	08
SHELLVILLE CT	38 15	122 29	18	9		11 72	06 76	11	8
SHELTER COVE	40 02	124 04	123				76	9	7
SKYLINE CT	37 30	122 22	265	9		04 74	06 76	11	8
SLOUGHHOUSE	38 31	121 08	98	10		01 76	01 77	20	08
SOUTH PASADINA CT	34 06	118 08	189	10		09 72	01 75	32	8
SPRING VALLEY	32 45	117 00		10		03 73	02 75	26	08
STADIUM	32 46	117 07		10		07 74	05 75	26	08
STOCKTON CT	37 58	121 15	8	10		04 75	09 77	25	8
STUDIO CITY CT	34 08	118 14	180	10		12 73	02 75	32	8
SUMMIT VALLEY	34 19	117 23	1050	11		08 73	06 75	23	8

1/ See explanation at end of table.

TABLE 2. NONSUMMARIZED WIND RECORDS FOR 372 CALIFORNIA STATIONS
(Continued)

STATION NAME	LAT	LONG	EL M	INST HGT	NO.OF OBS	START MO YR	END MO YR	SU 1/	TI 1/
SUNLAND FENWICK	33 15	118 18	415	10		10 72	07 73	32	8
SUNLAND TUJUNGA	34 15	118 20	354	10		04 72	04 74	32	8
SUNNYVALE	37 21	122 03	9			07 32	03 42	9	7
SUNNYVALE ACPD	37 22	122 02	31	13		10 73	07 76	10	7
TAHOE VALLEY	38 54	120 00	1930			02 60	76	9	7
TAFT	35 10	119 25	267			34	06 44	9	7
TAHOE CITY CG	39 11	120 07	1901				76	9	7
TEJON APT	35 02	118 45	435			05 28	08 34	9	7
TEMECULA	33 29	117 08	311	11		06 76	08 77	23	8
TEMECULA	33 27	117 08		10		09 74	04 75	26	08
TEMESCAL VALLEY	33 46	117 29	344	10		06 75	09 77	32	8
THERMAL AIRPORT	33 37	116 12	311	10		05 50	12 54	26	08
TIBERON CT	37 52	121 27	8	9		11 74	07 76	11	8
TOLL HOUSE/168	37 04	119 22		10		06 74	06 75	22	08
TORRANCE REF 10	33 53	118 18	5		36901	08 52	06 60	14	9
TORRANCE	33 48	118 20	29			03 59	76	9	7
TOWER 5A	36 47	116 20	1111	29		58	64	7	1
TRACY	37 46	121 32	20			05 28	03 39	9	7
TREASURE ISLAND	37 49	122 22	3					13	
TRINIDAD HEAD	41 03	124 09	109				76	9	7
TRUCKEE	39 19	120 08	1800				76	9	7
TRUCKEE APT	39 22	120 09	1777			10 29	03 36	9	7
UKIAH PAA	39 08	123 12	192			03 47	12 68	9	7
VALLEJO 37 CT	38 08	122 15	2	10		06 73	01 75	25	8
VALLEJO 141 CT	38 06	122 16	2	10		04 75	10 76	25	8
VALLEJO ACPD	38 06	122 14	23	8		07 72	07 76	10	7
VALLEJO-NAPA	38 13	122 17	10			03 47	06 53	9	7
VERNALIS	37 36	121 18	59			07 43	01 46	9	7
VISALIA	36 20	119 24	88			12 46	12 68	9	7
WABASH	32 41	117 07		10		11 72	11 74	26	08
WALNUT CIT ASO 46	34 01	117 52	16	9	64286	01 57	11 64	149	
WALNUT CREEK CT	37 52	120 03	92	9		04 74	07 76	11	8
WALNUT GROVE TV	38 14	121 13	18					13	
WATSONVILLE	36 56	121 47	46			03 47	08 56	9	7
WEED CT	41 26	122 21	1066	10		10 73	10 74	18	8
WEST CASITAS	34 23	119 25		10		06 76	08 77	21	08
WEST WOOD	40 18	121 00	1549			01 29	04 33	9	7
WESTMINSTER CT	33 44	117 59	8	10		03 72	04 74	32	8
WHEELER RIDGE	35 01	118 59	366			05 76		12	7
WILLIAMS	39 06	122 09	39			06 31	12 52	9	7
WILTON	38 24	121 17	30	10		04 76	12 76	20	08
WINTERS	38 31	121 58	40			07 28	07 31	9	7
WOOD ROAD	33 51	117 19	532	11		06 75	08 77	23	8
WOODEN VALLEY CT	38 27	122 13	229	9		06 73	11 74	11	8
WOODLAND HILLS CT	34 09	118 38	290	10		08 73	09 77	32	8
YORBA LINDA CT	33 45	117 45	104	10		03 75	09 77	32	8
YUCA FLAT	37 04	116 03	1242	29				7	

1/ See explanation at end of table.

TABLE 2. NONSUMMARIZED WIND RECORDS FOR 372 CALIFORNIA STATIONS
(Continued)

STATION NAME	LAT	LONG	EL M	INST HGT	NO.OF OBS	START MO YR	END MO YR	SU 1/	TP 1/
YUCA NEV	36 57	116 03	1196						
YUMA TEST STA	32 50	114 21	99		69978	01 55	12 62	2	1

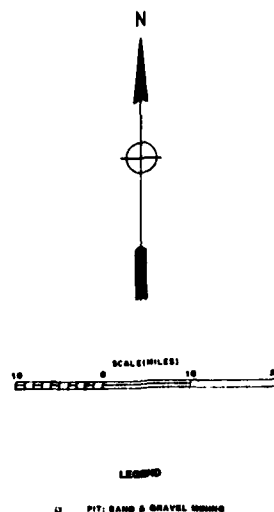
FOOTNOTES FOR TABLES 1 AND 2

SU=RECORD SOURCE

- 1 PACIFIC GAS & ELECTRIC CO.
- 2 NATIONAL CLIMATIC CENTER, ASHVILLE NC
- 3 LAWRENCE LIVERMORE LAB
- 4 LAWRENCE RADIATION LAB
- 5 HUNTER LIGGETT MILITARY R
- 6 BAY AREA AIR POLLUTION DST
- 8 WIND IN CALIFORNIA (1961)
- 9 ORIGINAL WEATHER RECORDS NCC ASHVILLE NC
- 10 BAY AREA AIR POLLUTION CONTROL DISTRICT
- 11 CALTRANS DIST 4 SAN FRANCISCO
- 12 DWR ENERGY DIVISION
- 13 CAL ST UN SAN JOSE, MET DEPT
- 14 SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
- 15 SACRAMENTO MUNICIPAL UTILITY DISTRICT
- 16 DESERT RESEARCH INSTITUTE UN
- 17 OREGON ST UN CORVALLIS, ATMO SCI
- 7 ESSA AIR RESOURCES LAB
- 18 CALTRANS DIST 2 REDDING
- 19 CALTRANS DIST 1 EUREKA
- 20 CALTRANS DIST 3 MARYSVILLE
- 21 CALTRANS DIST 5 SAN LUIS OBISPO
- 22 CALTRANS DIST 6 FRESNO
- 23 CALTRANS DIST 8 SAN BERNARDINO
- 24 CALTRANS DIST 9 BISHOP
- 25 CALTRANS DIST 10 STOCKTON
- 26 CALTRANS DIST 11 SAN DIEGO
- 27 UNIVERSITY OF CALIF
- 28 LOS ANGELES DEPT OF WATER AND POWER
- 1 VELOCITY-DIRECTION TABLES AVAILABLE
- 29 U S FOREST SERVICE
- 30 SOUTHERN CALIE EDISON CO
- 31 CAL ST UN NORTHRIDGE GEOGRAPHY DEPT
- 32 CALTRANS DIST 7 LOS ANGELES

TP=RECORD TYPE

- 2 OBSERVATIONS ON MAGNETIC TAPE
- 3 ENERGY SPECTRA
- 4 AVERAGE DAILY WIND SPEED
- 5 WIND ROSE
- 6 WIND ROSE AND VELOCITY-DURATION DIAGRAM
- 7 UNPROCESSED HOURLY OR 3 HOURLY RECORDS
- 8 STRIP CHARTS MRI MODEL 1071
- 9 ANNUAL SUMMARY UNAVAILABLE

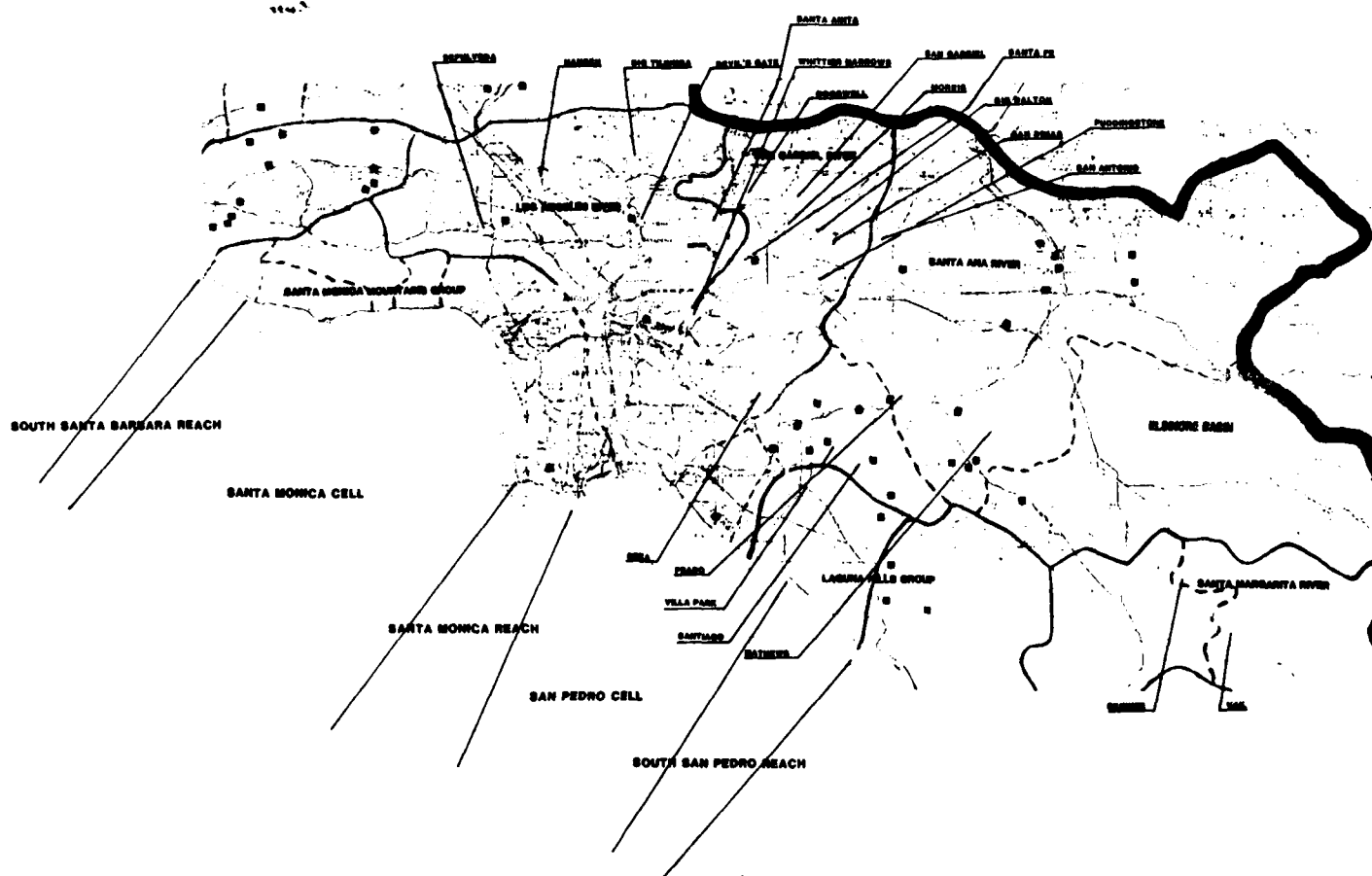


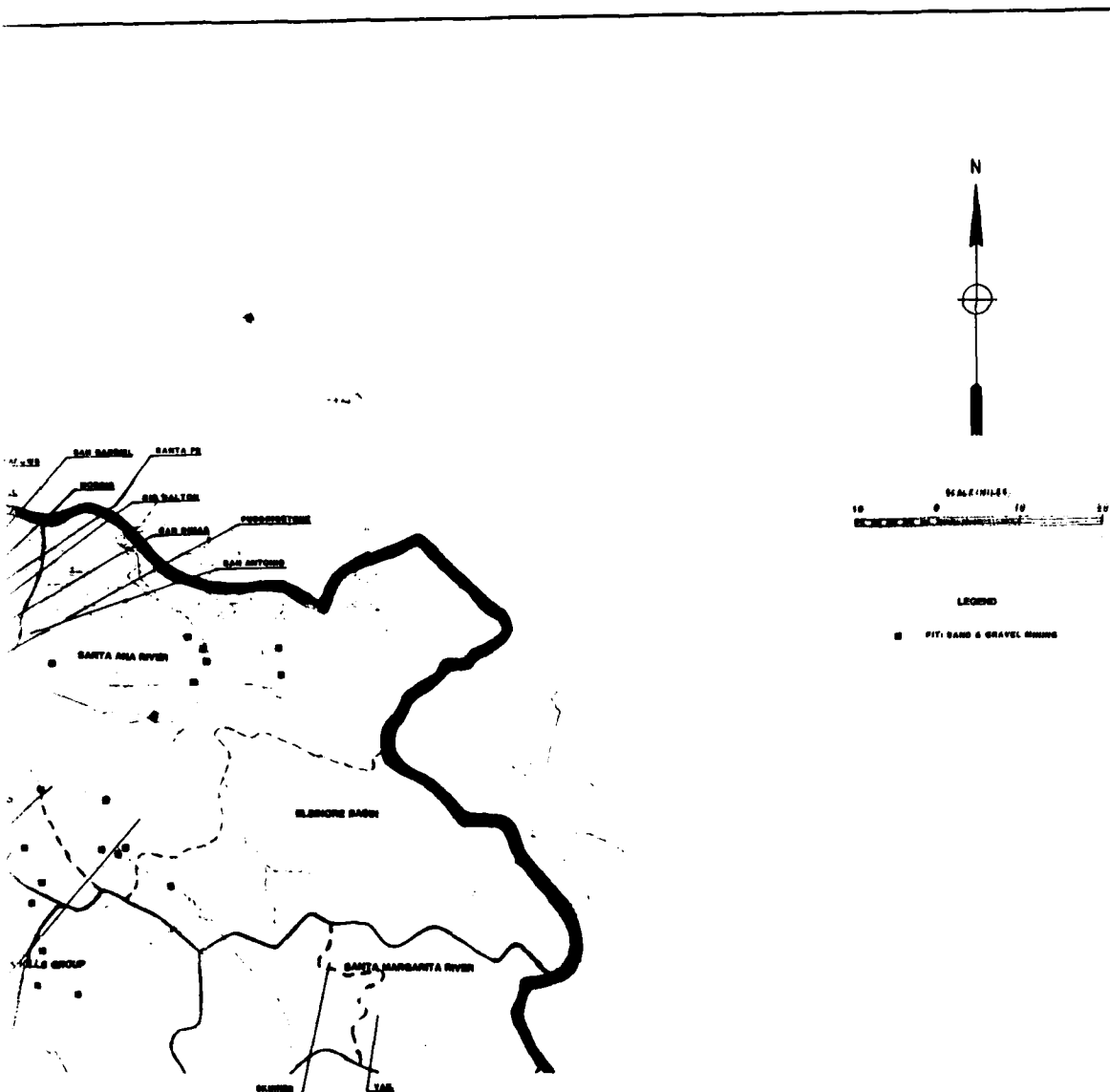
DHA
CONSULTING
ENGINEERS


COAST OF CALIFORNIA STORM AND TIDAL WAVES STUDY (CCSTWS)
LOS ANGELES DISTRICT BOUNDARIES: CALIFORNIA COASTLINE FROM THE
MEXICAN BORDER TO RAGGED POINT

PREPARED FOR LOS ANGELES DISTRICT CORPS OF ENGINEERS

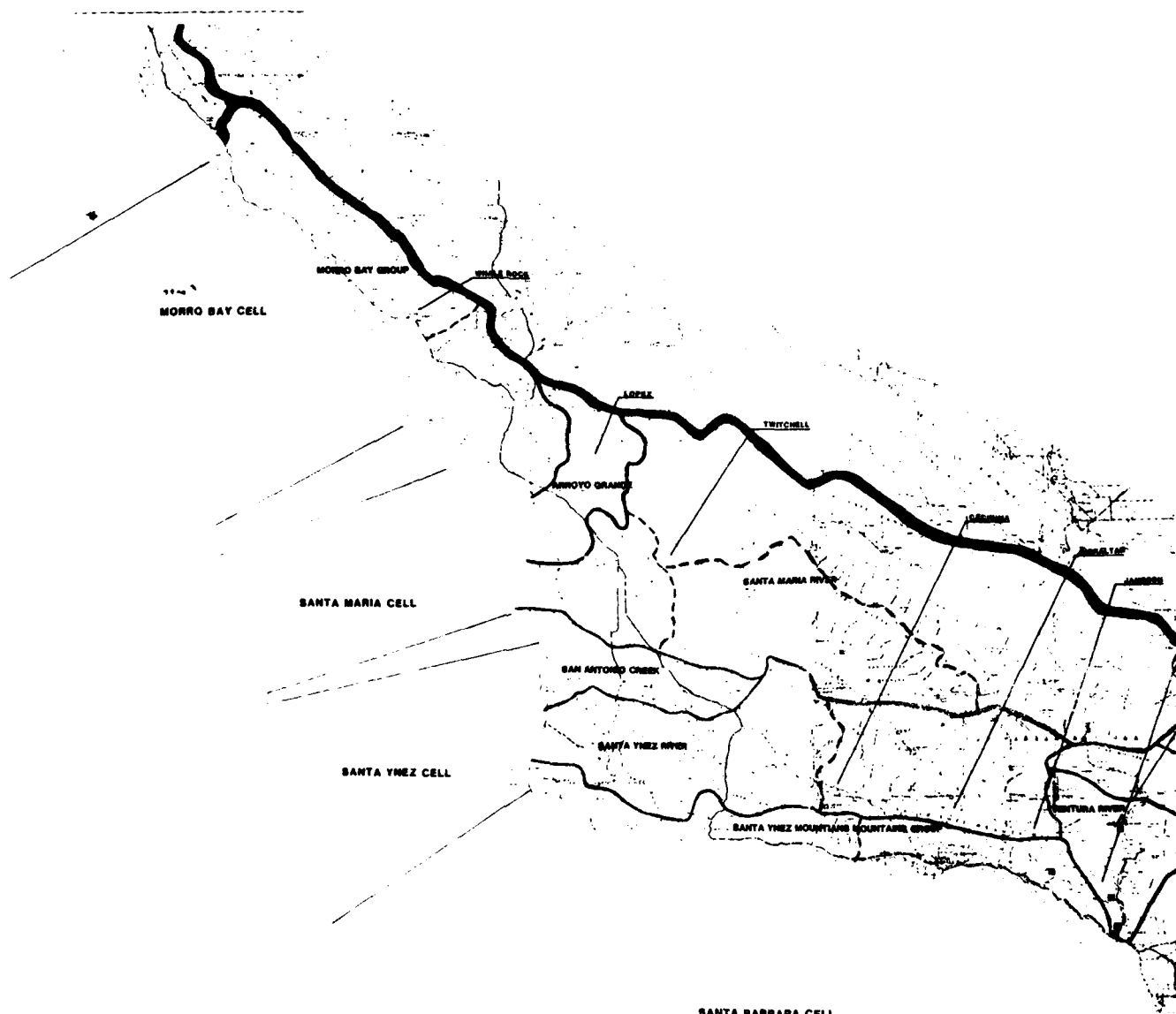
WATERSHED AND LITTORAL CELL BOUNDARIES AND MAJOR CONTROL STRUCTURE LOCATIONS





 <p>DWA CONSULTING ENGINEERS</p>	<p>PLATE 3.1 SOUTH COAST REGION</p>	
	<p>COAST OF CALIFORNIA STORM AND TIDAL WAVES STUDY (CCSTWS)</p>	
	<p>LOS ANGELES DISTRICT BOUNDARIES · CALIFORNIA COASTLINE FROM THE MEXICAN BORDER TO RAGGED POINT</p>	
	<p>PREPARED FOR LOS ANGELES DISTRICT CORPS OF ENGINEERS</p>	
<p>WATERSHED AND LITTORAL CELL BOUNDARIES AND MAJOR CONTROL STRUCTURE LOCATIONS</p>		
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2.22



END

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